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# The Army's Strategic Communication and the Informational Dimension

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**Strategic communication**<sup>1</sup> can be defined as integrated communication, synchronized and aligned with the actions taken by an organization to achieve its goals. It presupposes the combination of practices adopted in the context of traditional **social communication**<sup>2</sup> with systematic **institutional relations** and the use of **digital media**, including social media and social networks. This concept of communication, typical of the corporate environment, is perfectly applicable to communication within the Brazilian Army.

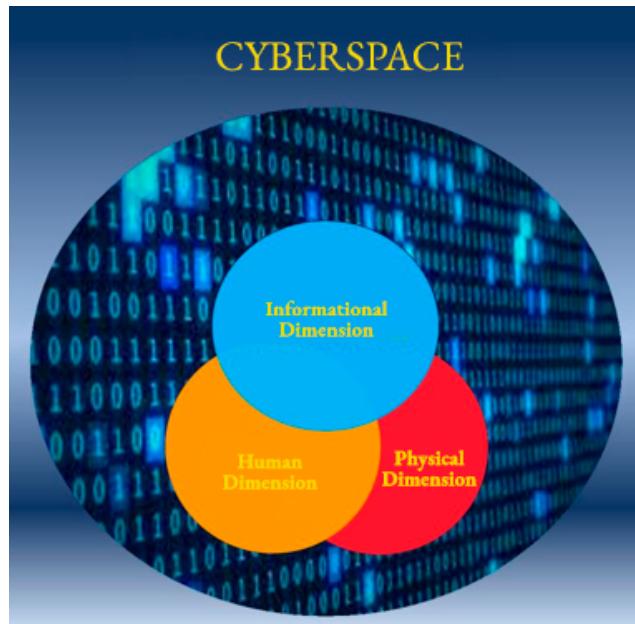
It is important to analyze the development of the Brazilian Army's strategic communication as a function of the complexity characteristic of the informational dimension, applying both concepts to the institutional and operational aspects of this communication, considering the growing relevance of actions.

The military ground doctrine states that the operational environment where military actions take place comprises three **dimensions**: the physical, which is geographical and material in nature, emphasizing the terrain, weather conditions and equipment; the human, of a psychosocial and cultural character, based on the interactions between troops and the involved populations; and the **informational**, highly dependent on technological means, focused on the elaboration of narratives that portray perceived reality (BRASIL, 2017b). The **cyberspace** stands above this configuration (Fig. 1). Although one should not lose sight of human intentionality in the phenomenon of communication, the cyberspace is where the acceleration, potentialization and automation of the most diverse systems and processes is taking place.

<sup>1</sup> There is no consolidated definition in the literature about this concept. However, there is a consensus that these are integrated communication actions aimed at achieving organizational objectives.

<sup>2</sup> It comprises Public Relations, Press Office and Institutional Publicity activities (BRASIL, 2017b).

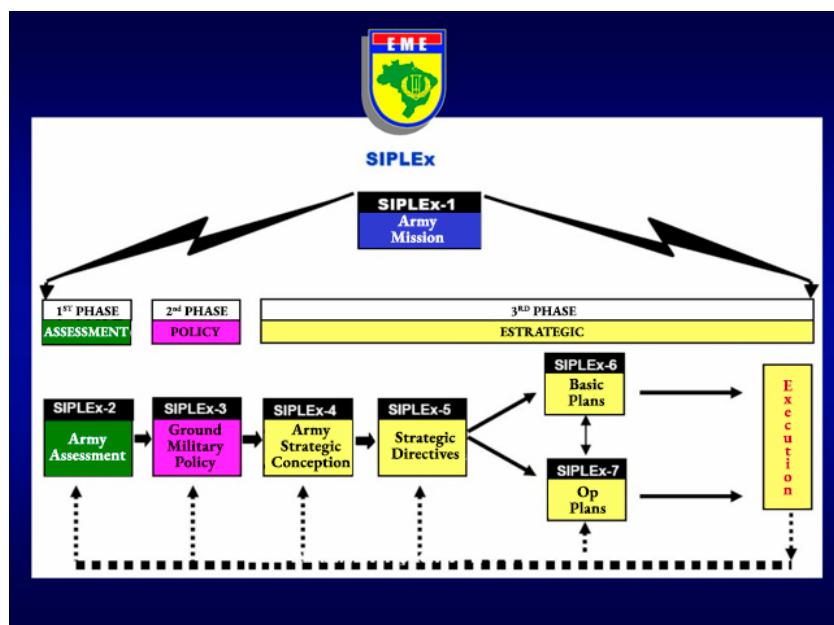
Figure 1 – Dimensions of the operating environment



Source: Brasil (2017b).

By means of its Strategic Planning System (*Sistema de Planejamento Estratégico – SIPLEX*) (Fig. 2), the Brazilian Army clarifies its institutional objectives and specifies the conditions necessary for carrying out its planned actions. In line with SIPLEX, Army communication acquires strategic features and is ratified according to its integration and synchronization capacity – either in relation to its own specific objectives or in supporting the pursuit of others.

Figure 2 – SIPLEX Schematic



Source: Strategic ... (2005)

The corporate system in charge of the Army's social communication is the SISCOMSEEx<sup>3</sup>, whose central organ is the Army Social Communication Center (*Centro de Comunicação Social do Exército* – CCOMSEEx). The CCOMSEEx is responsible for proposing communication plans and guidelines and coordinating the corresponding actions, using a network dedicated to this: RESISCOMSEEx<sup>4</sup>. Additionally, CCOMSEEx's institutional role is expanded by its function as the direct and immediate assistance organ (órgão de assistência direta e imediata – OADI) to the Army Commander.

The strategic, eminently institutional, permanent and systematic character of Army social communication does not restrict its participation in the operational environment. On the contrary, it enhances this participation, particularly in the field of information operations (BRASIL, 2014), which is one of its information-related capabilities (*capacidades relacionadas à informação* – CRI). In this field, **strategic communication assumes operative features**, and becomes an indispensable tool for multiplying combat power. In the human dimension, it strengthens troops' corpus spirit and morale; in the **informational dimension**, it seeks to dominate the narrative in order to obtain the support of public opinion, the informational dimension's center of gravity.

In any situation, considerations about cyberspace activities are imperative, given their relatively low cost and the difficulty of assigning narrative responsibilities in such an ambiguous environment, and in which the enemy of the enemy is not always a friend.

Considering this range of attributions, CCOMSEEx has the primary **mission of preserving and strengthening the Army's image**. The Army relies on an immaculate reputation and on the highest indexes of credibility among Brazilian society. These are essential conditions if the institution is to achieve its goals.

The mission of preserving the Army's image implies a preventive and reactive approach in the face of potential or concrete threats. The most important assets are the institution's credibility and reputation cores. Thus, its ethical principles and underlying moral values, the organizational culture that characterizes it, and the consolidated narrative of its historical trajectory need to be permanently protected against adverse stances that, explicitly or covertly, may affect the image of the Force and hamper the achievement of its strategic objectives.

In this context, the following should be given special attention: the Army's educational establishments and the military education provided by them, which is recognized for its high quality and worship of the Institution's core values; the memory of the patrons and other figures and historical facts by way of which the Ground Force became notable; the honorability of commanders, chiefs and directors at all levels; the respect for the precepts of hierarchy and discipline; the current employment of the Force in a broad spectrum of operations; the narratives compiled by the Force and disseminated by SISCOMSEEx, particularly in the Army's various digital media assets.

Eventual deficiencies observed in the treatment of these themes can become vulnerabilities that could be exploited negatively. Such deficiencies can have even more significant

<sup>3</sup> System composed of the 'A,' 'B,' 'C,' or 'Special' class of agencies. These are social communication structures distributed throughout all Army military organizations (BRASIL, 2017b).

<sup>4</sup> Collaborative network used by system members to establish the technical channel connections necessary for the operation of SISCOMSEEx (BRASIL, 2017b).

reflexes when they present themselves in the cyberspace. The methodology for the analysis of risks affecting organic safety is also relevant here. Inadequate exposure or overexposure of subjects of interest, for example, is a significant risk deserving proper consideration. The lack of alignment, synchronization and integration of communication – that is, the loss of its strategic character – is the worst possible scenario. It may be construed as a shortcoming in the institution's "social cybersecurity" (a field dealing with understanding and predicting changes in human behavior caused by cybernetics and their social, cultural and political outcomes) (BESKOW, CARLEY, 2019).

Threats to the Army's image – like any other threat against the achievement of its strategic or operational objectives – may be of internal or external origin, from regular or irregular opposing forces, non-governmental organizations or other agencies, media producers, or unstructured actors. Attacks delivered in the informational dimension are ultimately aimed at disinformation, counterposition of alternative narratives with the deliberate purpose of harming the image, with or without factual foundation (e.g., *fake news*). Common resources for these attacks are *hackers*, *bots* and *trolls*<sup>5</sup>, manipulation, distortion, decontextualization, and falsification of profiles and content.

The appropriate response to these threats depends on an effective monitoring of the cyberspace, employing technological tools developed for the analysis of everything potentially related to the interests of the Army that circulates in digital media. In this task, strategic communication, intelligence and cyber defense need to act in an absolutely integrated way, so as to provide accurate decision-making advice to serve as a basis for the necessary direct and indirect actions. For the success of the Force's image preservation mission, initiative and leadership are key attributes that have to be observed at all levels. With the speed and breadth that characterizes cyberspace actions, there is no time to lose when it comes to adopting preventive or reactive measures.

The mission to strengthen the Army's image requires a proactive stance, with a view to taking advantage of all opportunities for the transmission of favorable messages by SISCOM-SEx members. Public opinion support provides the legitimacy necessary to obtain freedom of action and thus achieve the strategic and operational objectives of the Force.

Legitimacy is also related to understanding the structural importance of the Army in society. In this context, the scholar milieu provides the validation and credibility necessary for the construction of discourse to be disseminated via different media, including scientific journals.

Peer-validated scientific communication, constantly evaluated and reassessed, confers credibility and legitimacy to the work done by the Army alongside the rest of society, which directly participates in this construction.

The most positive attitude is the dissemination and reinforcement of narratives about the essential elements of the institution's reputation and credibility in an integrated and synchronized manner – after all, "everything communicates!" In this regard, all available

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<sup>5</sup> Typical cyberspace actors, *hackers* are individuals who can make unauthorized modifications to computer systems; *bots* are software designed to act as robots simulating human actions; and *trolls* are agents responsible for disrupting content editing and social network discussions.

vehicles must be mobilized, with particular attention to digital platforms. The pursuit of partnerships with agencies outside the Force – in order to multiply the effect of these narratives – is highly recommended. To this end, the systematization of institutional relations, including with the media, is a relevant component of the Army's strategic communication.

The aligned, integrated and synchronized use of digital media within SISCOMSEx is critical to mission success. To this end, the Standards for the Creation and Management of Social Media within the Brazilian Army were published on July 1, 2019 (BRASIL, 2019). These norms constitute an essential disciplinary instrument for the Army's strategic communication, clearly explaining what is permissible and desirable and safeguarding the Institution from any interactions harmful to the Force's narratives.

Strengthening the Army's image also involves the use of artificial intelligence. On March 1, 2019, Soldier MAX (*Módulo Auxiliar de relações públicas*) was incorporated into the ranks of the Army. The name is homage to the World War II Brazilian hero.<sup>6</sup> A groundbreaking initiative, this Army-developed chatbot has demonstrated exceptional interactive capability, particularly with younger audience segments interested in joining the Ground Force.

Even though the dimensions of the operating environment are all permeated by cyberspace, one cannot lose track of the fact that the performance of an armed force is intrinsically linked to real facts, generated in the physical and human dimensions. The informational dimension refers to virtual representations of this reality. As such, these representations are subject to a series of multidisciplinary filters. History, Law, Sociology, Anthropology, Psychology, among other disciplines, together with diverse ideological positions, shape society's perception of reality. Thus, the construction of narratives aimed at strengthening the Army's institutional image needs to take into account this complex spectrum of knowledge areas.

One of the most appropriate spaces for the discussion and construction of these narratives in the different areas of knowledge is the academic space. In it, a freethinking and legitimate scientific community develops its own discourses. For this to happen, especially in Social and Human Sciences, a diversity of thoughts, research, and institutions – including the Army – have to be present.

In the literature on so-called Hybrid Warfare, one can see the combination of these dimensional variables, integrated and synchronized with traditional forms of combat. This integration has a deep impact on public behavior. Narratives manipulated in the cyberspace are often used to obtain legitimacy and the consequent freedom of action. The Army has to be prepared for this kind of conflict. Nothing better, then, than being proactive in strengthening the institution's image and domain of narrative, whether in peace or wartime.

As we have shown, the preservation and strengthening of the Army's image in contemporaneity requires one to advance beyond the scope of traditional media. Our communication logic must shift towards the adoption of the precepts of strategic communication.

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<sup>6</sup> Sergeant Max Wolf Filho, killed in action in the Montese region of Italy on April 12, 1945.

An institution with the Army's reputation and credibility owes much of this condition to the respect for truth and transparency, the latter limited only by the secrecy surrounding national security issues.

Although nowadays fashionable, so-called post-truth (POST-TRUTH, 2019) – which opposes facts in order to appeal to emotions, feelings, beliefs and ideological passions, creating alternative narratives – is not in line with the Army's strategic communication. This kind of opportunistic narrative does not endure in democratic societies that are grounded on solid institutions. They cannot, however, be disregarded, due to their potential for causing severe damage that disinformation can cause. Victory, in this context, demands constant vigilance and permanent disposition for proactive action in the informational dimension.

With the increasing technological possibilities provided by cyberspace, which are enhancing and automating informational actions, today it is even more important to observe solid ethical principles, ensuring that the Army's regularity and permanence are preserved. This is consistent with the greatness of the mission to defend the Brazilian homeland.

In this sense, a scientific journal, as a means of communication legitimized by the scientific community, is undoubtedly a permanent channel of dialogue. The Meira Mattos Collection is part of this institutional construction. Good reading!

## References

BESKOW, D. M.; CARLEY, K. M. Segurança cibernética social: um requisito emergente de segurança nacional. **Military Review**, Fort Leavenworth, KS, 3º Trim., p. 25-35, 2019. Disponível em: <https://www.armyupress.army.mil/Journals/Edicao-Brasileira/Arquivos/Terceiro-Trimestre-2019/Seguranca-Cibernetica-Social/>. Acesso em: 01 jun. 2019.

BRADSHAW, S.; HOWARD, P. N. **The Global Disinformation Order: 2019 Global Inventory of Organised Social Media Manipulation**. Oxford, UK: Project on Computational Propaganda. Working Paper 2019.3.

BRASIL. Exército Brasileiro. **Manual de campanha: operações**. 5. ed. Brasília: Estado-Maior do Exército, 2017a. EB20-MF-03.103. Disponível em: <https://bit.ly/30kipLO>. Acesso em: 01 jun. 19.

BRASIL. Exército Brasileiro. **Manual de campanha: operações de informações**. Brasília: Estado-Maior do Exército, 2014. EB20-MC-10.213. Disponível em: <https://bit.ly/2KXwZCq>. Acesso em: 01 jun. 19.

BRASIL. Exército Brasileiro. **Manual de fundamentos: comunicação social**. 2. ed. Brasília: Estado-Maior do Exército, 2017b. EB20-MF-03.103. Disponível em: <https://bit.ly/2Mnze5v>. Acesso em: 01 jun. 19.

BRASIL. Exército Brasileiro. **Portaria Nº 196-EME, de 1º de julho de 2019**. Aprova as Normas para Criação e Gerenciamento das Mídias Sociais no Âmbito do Exército Brasileiro. Brasília: EME, 2019. Disponível em: <https://bit.ly/2Z6e5n2>. Acesso em: 01 jun. 2019.

BRASIL. Exército. **Sistema de Planejamento do Exército Brasileiro (SIPLEX)**. Brasília, DF: EME, 2014. Apresentação.

POST-TRUTH. *In: Lexico. [S.l.]: Oxford, c2019*. Disponível em: <https://www.lexico.com/en/definition/post-truth>. Acesso em: 01 jun. 2019.



# Globalization and the future of the Community of Portuguese Language Countries - CPLP: the potential of the block as a defense strategy for Brazil

*La globalización y el futuro de la Comunidad de los Países de Lengua Portuguesa – CPLP: el potencial del bloque como Estrategia de Defensa para Brasil*

**Abstract:** Over the years, Brazil has been tightening its relationship with the member countries of the Community, as recommended in our National Defense Policy (PND). This work analyzed, in the light of the current post-Cold War international conjuncture, the extent to which the CPLP presents itself as a potential block to contribute to the achievement of the National Defense Objectives (OND) mentioned in the National Defense Strategy (END). The methodology used consisted of descriptive elements of internet articles; conditional documents of defense; lecture; and the bibliographic research carried out at the National Defense College - ESG. Initially, it addressed globalization and its influence on the block. Subsequently, the history of the Community was rescued; the important aspects of the maritime universe of the CPLP, the Cooperation Agreements, mainly in the Defense Area, without considering economic or mobilization aspects related to military exercises carried out between the Armed Forces of the block. And finally, possible direct aligned ONDs were described and confronted with the brazilian strategic interest with the CPLP. The conclusion indicates that the CPLP is configured as an excellent Defense Strategy platform for Brazil.

**Keywords:** CPLP. Globalization. Defense strategy.

**Resumen:** A lo largo de los años, Brasil viene estrechando la relación con los países miembros de la Comunidad, como recomienda nuestra Política Nacional de Defensa (PND). El presente trabajo analizó, ante la actual coyuntura internacional globalizada, pos Guerra Fría, en qué medida la CPLP se presenta como bloque en potencial para contribuir a la consecución de los Objetivos Nacionales de Defensa (OND) mencionados en la Estrategia Nacional de Defensa (END). La metodología utilizada se constituyó de elementos descriptivos de artículos de internet; de documentos condicionantes de Defensa; de conferencias; y de la investigación bibliográfica realizada en la Escuela Superior de Guerra (ESG). Inicialmente, se abordó la globalización y su influencia sobre el bloque. Posteriormente, se rescató el historial de la Comunidad; los aspectos importantes del universo marítimo de la CPLP, los Acuerdos de Cooperación, sobre todo en el ámbito de la Defensa, pero sin tener en cuenta aspectos económicos o de movilización relativos a ejercicios militares realizados entre las Fuerzas Armadas del bloque. Por fin, se describieron y confrontaron los posibles OND directamente alineados con el interés estratégico brasileño hacia la CPLP. La conclusión indica que la CPLP se configura como una excelente plataforma de Estrategia de Defensa para Brasil.

**Palabras clave:** CPLP. Globalización. Estrategia de Defensa.

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## 1 Introduction

In 2019, the Community of Portuguese Language Countries – CPLP will celebrate twenty-three years of existence. As a major player within the Community, Brazil seeks to make use of political-diplomatic and mutual cooperation actions to strengthen its relationship with the bloc's member countries. This is in line with the premises of the *Política Nacional de Defesa* – PND (National Defense Policy), and has the potential of making the Community another strategic national-interest platform.

In this sense, this study intends to analyze, in view of the current, globalized international conjuncture, to what extent the CPLP can be considered a potential contributor to the achievement of the *Objetivos Nacionais de Defesa* - ONDs (National Defense Objectives) prescribed in the *Estratégia Nacional de Defesa* – END (National Defense Strategy).

Thus, we will attempt to: a) describe the phenomenon of globalization and its influence on the bloc's countries; recover the history of the CPLP and its evolution to the present day, highlighting its strategic importance for Brazil; characterize the CPLP maritime universe, especially the South Atlantic, and the influence of the People's Republic of China (PRC) on the oceans that bathe the community (section two); b) take an in-depth look at the Cooperation Agreements between Brazil and the Community's member countries, also approaching the actions resulting from these agreements, with special attention to the area of Defense, verifying Brazil's performance within the Community in regards to this aspect; characterize the CPLP as a defense strategy for Brazil by describing which ONDs mentioned in the END are directly aligned with the Brazilian strategic interest towards the Community, assessing the potential of the bloc to achieve these objectives. Section four provides an overall conclusion.

The study itself addresses the universe of post-Cold War international relations; Brazilian performance within the CPLP; and the reflexes of the currently existing Cooperation Agreements between Brazil and the bloc's member countries. Special attention is given to the area of Defense and to the Brazilian Navy (*Marinha Brasileira* – MB), given the significant maritime space encompassing the CPLP (Atlantic, Indian and Pacific Oceans). Albeit superficially, other Agreements and their possible strategic-interest reflections are also mentioned. This paper will not address the economic, deployment, and budgetary aspects of military exercises carried out by the Armed Forces of CPLP member countries, due to the restricted access to data on these subjects.

The analysis will be carried out by identifying feasible ONDs—as highlighted in section three—while confronting them with activities and Cooperation Agreements developed by Brazil alongside the bloc. As described in the Brazilian Constitution and in Brazil's defense-conditioning documents (our Defense Whitepaper, known as the LBDN or *Livro Branco de Defesa Nacional*, as well as the PND and the END), our end goal is to assess the CPLP's potential contribution to the achievement of these ONDs.

The information analyzed here was extracted from internet articles, documents, lectures and academic bibliography (VERGARA, 2007). These sources will subsidize our argument of the importance of the CPLP as a defense strategy for Brazil.

## 2 Globalization, the CPLP and Brazilian strategic perception

There are several definitions regarding the concept of ‘globalization’ and its origin. Today, most people perceive it as strictly associated with economic factors. It is very true that even during the European maritime expansion and the great navigations of the 15<sup>th</sup> and 16<sup>th</sup> centuries the exchange of goods demanded a high degree of global interconnectedness.

Globalization, in fact, is not a 21<sup>st</sup> century phenomenon. Throughout the years, however, the term was subjected to an evolutionary process, gaining new connotations.

The globalization we know today emerged from improved transportation means, advanced telecommunications, and an entire shift in technological development, which has reached a new height with the advent of the internet. This shift catered to the demands of capitalism, since developed countries had a dire need for new markets, with their domestic consumption opportunities mostly saturated (AZEVEDO, 2015, our translation).

From the 80’s onwards, an accelerated pace of technological transformation allowed the world’s main economies—the members of the G7<sup>1</sup>—to feverishly expand their markets, creating today’s so-called “global village” (2013) and fulfilling the necessities of these central economies.

However, it would be wise to remember that globalization is not just about economic factors: it also involves cultural, financial, and political issues. Above all, globalization entails asymmetric power relations.

Similarly, the effects of globalization are a highly debatable point. Its advantages and disadvantages may not have the same respective weights in the ‘political scale’ of international relations.

In any case, this phenomenon has undoubtedly imposed new limits on the exercise of state sovereignty. In this sense, many developing countries have sought ways to adapt themselves to globalization’s negative effects.

It became clear at an early stage that the only way out of the domination imposed on weaker states would be cooperation in the form of regionalization and partnerships. In thesis, the formation of alliances between the less-industrialized countries would create a kind of mega-state, able to survive the terrible consequences of globalization, generating a stronger counterpoint to the great powers.

In this sense, Santos (2000, p. 137, our translation) categorically points out a way out of globalization’s perverse domination:

Regional blocs are, in fact, an effort by member nations to minimize the negative effects of the globalization process. These blocs enable trade between nations in the same

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<sup>1</sup> The Group of Seven (G7) is an international group consisting of Germany, Canada, the United States, France, Italy, Japan, and the United Kingdom. The European Union is also represented. These countries are the seven most advanced economies in the world, according to the International Monetary Fund (IMF), and account for more than 64% of global net wealth, equivalent to US\$ 263 trillion (G7, 2019).

region, better negotiating conditions with other blocs, and even a political stance with greater overall weight.

Within this context, various regional and non-regional blocs (partnerships) have been formed, in order to articulate and compose a mega-state profile capable of competing with other nations on an equal footing, especially to face the dominant economy represented by the US.

The above understanding is justified by authors Costa e Silva (2004, p. 121, our translation) in the following excerpt:

[...] At the current juncture, economic polarization has been transfigured into regionalization. The [economic] center demands scale, and small countries must come together in larger markets—mega-states such as the European Union—or conform to remaining or becoming peripheral.

Cabral (2004, p. 9, our translation) corroborates this view: “The concept of a mega-state, in this formula, implies the formation of new poles of power; these poles would displace the dominant system from its present hegemonic centrality.”

It is also worth mentioning that the South Atlantic region and the West African coast are within the Brazilian strategic environment and, according to Saraiva (2015, p. 52, our translation), “Africa is the last frontier of global capitalism.” As African countries fall within the group of least developed countries, the reflexes of globalization may be even more prominent there. The African continent’s incipient stage of globalization means that its survival in the face of globalization requires the application of several strategic actions. Thus, the Brazilian strategy of cooperation and the deepening of relationships with Portuguese language countries is of paramount importance.

Portuguese-speaking countries are a relevant space for Brazilian cooperation: ... our common language facilitates the implementation of projects, especially when it comes to human resources training. In this context, Brazil has been developing bilateral cooperation agreements with the Portuguese-speaking African countries (PALOP) and with East Timor, while also undertaking multilateral actions within the Community of Portuguese Language Countries (CPLP) (DIAS, 2015, p. 12, our translation).

In this sense, the CPLP—with the majority of its member countries in the African continent—may be an important step towards the fulfilling of Brazil’s National Defense Objectives, as established by our National Defense Strategy (BRASIL, 2016a). However, this possibility has to be subjected to rigorous analysis. In line with Almeida (2003, p. 155, our translation), “[...] one of Brazil’s objectives in the Community of Portuguese Language Countries is to open new commercial, political and diplomatic niches.” This is one of the scenarios that will be assessed later in this text.

In the 23 years of the CPLP’s existence, Brazil, the main protagonist of this Community of more than 230 million inhabitants, has increasingly made use of its political-diplomatic

experience and sense of mutual cooperation to try and strengthen its relationship with the bloc's countries. This approach is in line with the PND (BRASIL, 2016b), and can certainly make the Community another national-interest strategic platform.

Thus, at least in regards to economic goals, future prospects can elevate the Community to new heights, leveraging globalization to deepen the relationships between its members.

In regards to this new phase of the Community's development, Gala (2011?) states that East Timor's adhesion in 2002 has created an opportunity to project the Portuguese-speaking universe onto Asia. Mota (2009, p. 52, our translation) agrees that this is an important strategic component: "[East Timor] is a strategic point in the Pacific for the CPLP and its members, akin to Macao for the CPLP's representation in the increasingly competitive Asian world."

In analyzing other geopolitical strategies whose object is the CPLP, the importance that the PRC has attached to the African continent is undeniable. China is deeply interested in the region's inputs and raw materials, which is why the Asian country's investments, influence, and even presence in the Lusophone area have increased in recent years.

It should also be noted that the Macao Special Administrative Region, where the Portuguese language is still widely spoken, is undoubtedly a gateway between the CPLP and the PRC. As the largest destination for Brazilian exports, the PRC has a broad economic relationship with Brazil. The construction of a solid political-diplomatic relationship with this global player—which now occupies the second position in the international economic scenario—is a must for the CPLP bloc, and consequently for Brazil.

The Brazilian foreign policy and its evolution since the creation of the Community is yet another extremely important aspect, a major component of the political-diplomatic relationship between Brazil and the CPLP. With the end of the Cold War and the hegemonic rise of the United States, accompanied by protectionist policies from the dominant economies of the time (G7), then President Fernando Henrique Cardoso seemed particularly sensitive to the future prospects and directions of the Community. In this sense, as pointed out by Saraiva (2001, p. 31), there was a need for formulas to translate the affinities between the bloc's members in a palpable and material way, especially in regards to concrete possibilities of technology transfer, trilateral cooperation, and partnerships with developed countries and multilateral agencies.

The institutional framework of the Community should rely on a well-defined structure (Heads of State and Government Conferences; a Council of Ministers; Permanent Negotiation Committees; and an Executive Secretariat), with clear objectives (political-diplomatic concertation; economic, social, cultural, and legal cooperation; as well as the promotion and diffusion of the Portuguese language)<sup>2</sup> assumed by its members, in order to provide a synergy in favor of the defense of common interests, establishing equality between partners, and projecting the bloc internationally.

<sup>2</sup> Available at: <<https://www.cplp.org>>.

Thus, the Brazilian government of the time perfectly understood the need to adapt to this aspect of the international scenario, i.e., to duly consider the CPLP. This orientation is even more apparent today, as there is a greater impetus towards South-to-South cooperation between Brazil and Africa, with the aim of building a bloc-wide strategy. Such strategy, which is undoubtedly in the national interest, requires a foreign policy capable of projecting the country and ensuring its “survival” in the face of globalization:

[...] The formation of the CPLP takes place in the international context, determined by regionalizing and globalizing trends. ... The proliferation of regional economic and trade arrangements poses new challenges to organizations emerging from alternative foundations, such as common language, as is the case of the CPLP. One must carefully consider the relevance of the CPLP vis-à-vis the European Union (for Portugal), the Mercosur (for Brazil), and the SADC (for Angola and Mozambique). In fact, it makes no sense for the CPLP to mold itself in the image of these other arrangements, given the reality of trade relations and geographical distance between its partners. The most appropriate form of accommodation for the Community is to potentiate other [kinds of] interests, which in turn will potentiate the CPLP itself (SARAIVA, 2001, p. 32, our translation).

As a matter of fact, when analyzing the bloc’s creation, it becomes clear that at the time there was not the slightest possibility of making the CPLP space a free-trade area modeled after the existing economic blocs. One has to take into account that the initial interests behind the creation of this Lusophone space had cultural and linguistic roots. However, since the beginning of the 21<sup>st</sup> century, and especially during former President Lula’s administration, the political stability of African governments (democracy), accompanied by the gradual opening of markets and their increasing development, resulted in an increased flow of capital and investments towards these countries. This allowed Brazilian companies and institutions to internationalize and develop activities in the African continent (VALE, ODEBRECHT, EMBRAPA, SENAI, FIOCRUZ etc.).

In President Dilma’s administration, however, the Brazilian external policy for the CPLP was almost forgotten. This was a consequence of the serious political and economic troubles plaguing Brazil. As a side effect of these problems, there was an even closer approximation between the PRC, the PALOP countries, and East Timor. This analysis is corroborated by Holzhacker (SANTOS, 2015, our translation), who states: “Since the beginning of the Dilma administration, Brazil has been losing its international legitimacy and its role as a major world power, especially in regards to the space it had conquered in African and Middle Eastern countries.”

At least in regards to economic aspects, the reinstatement of a forward-looking foreign policy for the CPLP could elevate it to new qualitative standards. New regionalization initiatives and partnerships could certainly leverage the Community’s already existing, and considerable, globalizing impetus. Today, the CPLP is comprised of nine countries (Angola, Brazil, Cape Verde, Guinea-Bissau, Equatorial Guinea, Mozambique, Portugal, São Tomé and Príncipe, and East Timor), as well as several associated observers (Georgia; Republic of Namibia; Republic of Turkey; Japan; Hungary; Czech Republic; Slovak Republic; and Oriental Republic of Uruguay), and 62 institutions who act as advisory observers.

Understanding the evolution of African countries and their development vis-à-vis the rest of the globalized world makes the universe surrounding CPLP member countries appear even more promising. Although not very expressive, there are interesting signs of improvement in several areas, especially social and economic indicators. These will simultaneously enroll in a process of urbanization; income improvement; increased consumption and demand for products, all of which are contributing to a positive evolution.

Brazil, associated with Mercosur, and Portugal, associated with the European Community—in addition to PALOP countries’ association with other blocs in Africa itself—have been intensifying cooperation arrangements aimed at promoting closer bilateral or bloc relations. Furthermore, the future adhesion of East Timor to the Association of Southeast Asian Countries (ASEAN) has been indirectly contributing to the development of the Community’s countries, as explained by Oliveira (2015, p. 45, our translation): “The cooperation received by the PALOP [countries] in the sphere of the CPLP, combined with bilateral agreements, contributes to the development of [CPLP] states.”

In the political-diplomatic field, Brazil has also been playing a key role in projecting the Community, especially with the bloc’s proactive participation in multilateral organizations and forums such as the UN and the World Trade Organization (WTO). This has led to important victories in defense of developing countries.

In trade terms, it is also important to recognize the implications of CPLP’s creation over the voting of WTO resolutions. Members of the CPLP participating in WTO negotiating rounds can support each other; Portugal, for example, can pressure the European Union regarding the protectionism of agricultural products, which is harmful to Brazil, among other possibilities. It is also key to understand how trade relations between CPLP member states can reduce the existing asymmetries between the eight countries (MOTA, 2009, p. 21, our translation).

Above all, the efforts of Brazilian foreign policy and diplomacy must be intensified in order to foster the bloc’s image of a mega-state, strengthening itself in the pursuit of common interests.

[...] Taking advantage of the globalization gap is a duty of CPLP member states, given the need to find solutions for the social and economic survival of their populations. The new view is based on the willingness to practice international politics actively, and not just reactively. ... Hence the need to expand CPLP’s negotiating capacity in various international fora; this is important, among other things, to allow it to benefit from international cooperation efforts and the affirmation of multilateralism (CARDIM; CRUZ, 2002, p. 323–324, our translation).

Another clear example of Brazil’s influence in building an architecture beneficial to the strategic interests of the bloc’s member countries was the election and reelection of

Brazilian Roberto Azevedo as WTO President. He received massive support from African countries. The election of Portuguese national Antônio Guterrez as the new UN Secretary-General (since January 2017) follows the same trend.

All of the above is corroborated by the following statement by Oliveira (2015, p. 38, our translation): "... the fact is that the CPLP has been strengthening itself in the international concertation, providing its member states with greater conditions of insertion, as well as a furthering their external competitiveness."

The foreign policy context surrounding CPLP countries requires special attention. The CPLP must pay constant attention to following the regional developments of globalization, pursuing a strategic vision capable of strengthening the deliberations of its organisms and instances<sup>3</sup>, thus solidifying the Community and its influence over the international scenario.

Given the immense geographical space between CPLP member countries, other nations' interests in access to raw materials and natural resources as well as external threats stemming from other motivations may have a direct bearing on the sovereignty of the Community's member countries. In these conditions, defense and security aspects become all too important, especially for Brazil.

Thus, defense-wise, CPLP regions within the Brazilian strategic environment—the West African coast and the South Atlantic—are defined as areas of priority interest in our PND (BRASIL, 2016b).

Moreover, the CPLP encompasses an even larger maritime universe than just the South Atlantic. Thus, the PND determines that maritime communication with the Macao Special Administrative Region (via the CPLP, given the proximity of East Timor) is an important pole of Brazilian entry and presence in Asia. It is worth noting that Brazil's close relationship with the PRC, as well as the technological perspectives for new, large-scale ships known as *New Panamax* and *Triple-E* (PANAMAX..., 2012), could lead to a new international ordering in the maritime transport of goods, reviving the old shipping routes used during historical European maritime expansion.

[...] However, the projection of Brazil's economic interests goes beyond the South Atlantic. This projection will be all the more effective if the country is able to correct course and restart its distraught industrial development. At the same time, the diminishing importance of the Panama and Suez Canals for the new classes of cargo ships and oil tankers renews the importance of the old discovery-age sea lanes; hence the need for a worldwide projection of Brazilian economic and political interests, breaking with the geographical limits imposed by official geopolitical thinking and reaffirmed in defense policies (ALBUQUERQUE, 2010, p. 81, our translation).

<sup>3</sup> Available at: <<https://www.cplp.org/Default.aspx?ID=2753>>.

In regards to security, since the CPLP has maritime areas in three different oceans, other powers may be envious of its wealth and maritime routes. This may even lead to transnational illicitness. In this sense, national-interest maritime communication lines—even those extending to Asia (East Timor)—must be a cause of security concern. Member countries' current defensive capacities, as well as their degree of interoperability in a possible joint use of forces against possible threats, may bear on how safe the members of the Community feel, especially in the case of Brazil.

In order to provide as reliable an understanding of Brazilian strategic interests as possible, especially regarding the maritime universe of CPLP member countries, one must resort to high-level defense documents, and address one of the main principles of the Brazilian Constitution (BRASIL, 1988), described in item I of its first article: sovereignty.

The LBDN (BRASIL, 2016a, p. 28, our emphasis and translation) provides the following description of the importance of the South Atlantic Sea for the country:

This ocean has relevant strategic areas, such as the “Atlantic Canyon,” [in Portuguese, Garganta Atlântica] between the northeast coast of Brazil and West Africa, an intercontinental space of vital importance for world trade. The southern passages connecting the Atlantic to the Pacific provide an alternative route to the Panama Canal, especially for large ships. The Cape of Good Hope, connecting the South Atlantic to the Indian Ocean, is an alternative to the Suez Canal and also offers the best access to the Antarctic Sea. The significant importance of the vast oil basin in the Brazilian continental shelf, as well as the oil import/export routes of equatorial Atlantic countries, are also worthy of mention.

The South Atlantic has economic, strategic, and political dimensions, all of which merit careful consideration.

Regarding the economic dimension, it should be noted that more than 80% of world trade is by sea. More than 92% of Brazil's international trade relies on this vast ocean, with its maritime communication lines with the rest of the world acting as gateways. These routes are similarly important for the bulk of Brazilian oil production, especially when considering the recent discoveries in the pre-salt regions. Other vital activities depending on these maritime routes are fishing, and also the mining of noble and rare minerals found in the EEZ (exclusive economic zone). Regarding the latter, it is worth mentioning that Brazil is negotiating the EEZ's expansion to 350 nautical miles, potentially increasing the Blue Amazon area by about 1 million km<sup>2</sup>, to a total area of 4.5 million km<sup>2</sup>. All of the above is undoubtedly not only a demonstration of the amount of resources available in the South Atlantic, but their extreme importance for the Brazilian economy.

Regarding the strategic dimension, these facts alone demonstrate how relevant the South Atlantic is for Brazil's exercise of sovereignty in this vast maritime space. To this end, the PND (BRASIL, 2016b, p. 8, our translation) emphasizes the following:

[...] the natural Brazilian maritime vocation is supported by its extensive coastline, the magnitude of foreign trade practiced in it, and the undeniable strategic importance of the South Atlantic, which hosts the so-called “Blue Amazon,” an ecosystem whose area is comparable to the Brazilian Amazon. [The Blue Amazon] is of vital importance to the country, as it contains an elevated potential of living and non-living resources: among them, the largest Brazilian reserves of oil and.

Regarding the political dimension, the proximity of the African Continent with Brazil—especially in respect to countries in Africa’s Western coast (which is part of the Brazilian strategic environment)—requires the adoption of policies to ensure security and sustainable socioeconomic development for the South Atlantic Region. Brazil seeks to ensure a close relationship with these countries and maintains a peaceful and collaborative environment in the South Atlantic by means of the South Atlantic Peace and Cooperation Zone (ZOPACAS) (BRASIL, 2017b), originated from a UN Resolution. The resolution prevents the proliferation of armed conflict and the introduction of nuclear weapons or other weapons of mass destruction by external interference (i.e., outsider states).

In line with the above understanding, the Ministry of Defense’s Normative Ordinance 64, from November 8, 2016 (BRASIL, 2016c, our translation) enacts the *Diretrizes de Defesa para a Área Internacional – DIRDAI* (Defense Directives for the International Area), clearly stating that: “In the African continent, we must seek to intensify our cooperation with countries within the Brazilian strategic environment, with the objective of consolidating a peace and cooperation zone in the South Atlantic.”

Such a comprehensive political effort in favor of security in the South Atlantic notwithstanding, constant vigilance must be maintained over maritime trade routes and against external interests aimed at accessing the riches within this vast maritime space. This vigilance must apply not only to routes directly concerning Brazil, but also to those linked to countries in the West African coast. In this regard, there are even problems related to transnational illicit activities that are currently plaguing the world as a whole, such as terrorism and piracy. In the Gulf of Guinea, the latter is a particularly serious cause of concern.

In this sense, Bernardino (2011, p. 46, our translation) states that:

The globalization of regional maritime conflict has witnessed a weakening of the capacities of states and their social, political and military structures in Africa, with a direct impact on their ability to safeguard their sovereignty and combat marginality and crime at sea.

Given this example of compromised sovereignty—which may present itself anywhere in the South Atlantic, posing a serious threat to any of the countries bordering this ocean—defense investments are essential. Hence the role of the CPLP, which will be discussed further in the next section.

Coveting developing countries’ raw materials and commodities (oil, minerals, etc.), especially the ones belonging to Brazil and the African countries, the PRC has been investing

in infrastructure capable of providing the largest possible flow of trade with these commercial partners. The PRC's actions are based on the precise understanding that the US has control of the world's major shipping lanes (Malacca Strait; Singapore; Gibraltar; Suez and Panama Canals). In this context, the old discovery-age routes are becoming increasingly important to the Chinese. These routes may eventually allow them to entirely bypass the current reliance on their Yankee competitors. In addition, the innovative *New Panamax* and *Triple-E* ship classes—much more capable of bringing Chinese products to the rest of the world—have motivated the Chinese to break with their reliance on the Suez and Panama Canals (even after the latter was widened, in 2016, to accommodate larger vessels). Thus, the Chinese have recently made a deal with Nicaragua and Russia for the construction of a new<sup>4</sup>, much larger-capacity Canal. The *Epoch Times* analyzes this situation as follows (CANAL..., 2016, our translation):

The construction of the Nicaragua Canal underscores China's need to ensure its access to the Pacific and the Atlantic, in order to protect the major sea routes and strategic points that connect the Asian giant with foreign markets and resource reserves.

With a view to the African Continent, the construction of a railway that will link Angola (Lobito) to Mozambique (Nacala)<sup>5</sup>, and also the Indian Ocean to the South Atlantic—besides other ramifications in the African interior—will greatly favor the logistics of supply to African countries, facilitating the shipment and selling of Chinese products.

It is also important to note that the Chinese presence in the African continent has been growing tremendously, especially within PALOP members. As evidenced by Veloso (2015, p. 53, our translation), corroborating the CPLP-Macao Forum association: “the Chinese foreign policy strategy of using the legacy of Portuguese colonization to get closer to the Lusophone world, facilitating negotiations as well as commercial and economic partnerships, has proven more than adept.”

In addition to the aforementioned Nicaragua Canal, China has a strategic participation in the construction of a railroad to connect the Pacific Ocean and the South Atlantic via South America: the Bi-Oceanic Corridor, with an endpoint either in Port of Açu<sup>6</sup> or Port of Paranaguá<sup>7</sup> (the location is yet to be defined). This shows that the PRC regards the commercial penetration of Latin America as equally important.

However, such a massive Chinese investment in the Pacific-Atlantic maritime interconnection—which includes a state-of-the-art maritime modal with greater transport capacity—would be of no use without a substantial improvement in port infrastructure, so the new demand can be met. Chinese needs, in this sense, could be a great opportunity to boost the

<sup>4</sup> Available at: <<https://bit.ly/2KEYMtK>>. Access on: June 27, 2019.

<sup>5</sup> Available at: <<https://bit.ly/2NhhWrV>>. Access on: June 27, 2019.

<sup>6</sup> Available at: <<https://bit.ly/327xkKQ>>. Access on: June 27, 2019.

<sup>7</sup> Available at: <<https://bit.ly/2NvpzuM>>. Access on: June 27, 2019.

Community's development; conversely, they can be framed as a significant competitive threat, since the CPLP bloc still faces serious limitations in terms of technology and equity to invest in port logistics. The PRC's power of penetration in the Lusophone world, accompanied by its large financial resources, means that it has a large leeway for increasing its influence within the Community, thus promoting its development. Such a strategy has fundamental importance for the PRC's commercial interests, especially in the South Atlantic.

Some say that as a result of the US shifting its concerns to the Asia-Pacific region, China's work in Latin America could be intended to fulfill its military interests, by promoting the securitization of the South Atlantic. However, this has not been the case so far: China's modern hard power is still no match to that of the US. Fully conscious of this limitation, China is heavily invested in a soft power strategy, which has successfully enhanced its relationship with Latin America and Africa in recent decades. This remains true not only from an economic, but also from a geopolitical point of view. China is seeking to further isolate Taiwan by diplomatic and foreign-policy means, which translates into trade and military cooperation (arms sales, military training, etc.) with Latin American and African countries, including Brazil and PALOP members. In this movement, China is also able to consolidate its presence alongside the countries bordering the South Atlantic, furthering its interests of gaining access to numerous mineral and energy resources. Finally, one must not forget that the South Atlantic can also provide China with access to the Antarctic continent.

In strategic terms, therefore, the CPLP's maritime universe, especially in the Southern Hemisphere, is integral to China's global maritime governance plan, which can be summed up as the creation of a *New Maritime Silk Road*. As the leading actor in the CPLP, and obliged to ensure the sovereignty of all of the bloc's member countries, Brazil cannot shy away from establishing a strategy of defense cooperation with the members of the Community. This becomes even more critical when we realize that not only the South Atlantic, but also the Indian (West African coast) and Pacific (near East Timor) oceans count among China's strategic maritime interests. This defense cooperation strategy has to be put into effect despite the fact that Brazil and China are major trading partners and colleagues in the BRICS<sup>8</sup>.

Thus, the following is the major outcome of the Chinese maritime strategy, according to the *Epoch Times*:

The Chinese regime's momentum towards the control of key maritime trade points is merely one part of a broader strategy. One of this strategy's tentacles is aimed at changing the current economic *status quo* in favor of China. On January 31, 2013, Captain James Fanell, at the time a US Pacific Fleet Intelligence Officer, delivered a speech that would later cost him his job: "Do not fool yourselves: the Chinese regime's

<sup>8</sup> The term 'BRICS' refers to the group of emerging-economy countries formed by Brazil, Russia, India, China and South Africa (BEZER-RA, 2018).

People's Liberation Army Navy is focused on war at sea, with an offensive against their opponent's fleets," he said, adding that "China's negotiating [efforts aim] to take control of other countries' resources" (CANAL..., 2016, our translation).

Regardless of the strategies that the major economic and military powers (Chinese or American) may adopt, and even considering the possibility of a permanent European presence in the South Atlantic<sup>9</sup>, it is high time for Brazil, together with the CPLP, to consider the adoption of a defense-cooperation strategic platform within the "Lusophone Seas."

### 3 The CPLP as a defense strategy for Brazil

Common cultural, ethnic and linguistic traits have facilitated long-standing agreements and projects among CPLP members, which has promoted exchanges between each nation as well as economic development in various sectors. This very cooperation has also contributed to the increase of Brazil's international projection in a globalized and multipolar environment: this equates to a strengthening of the mega-state that represents the Community.

In general, as demonstrated by the last CPLP Council of Ministers Meeting held in Brasília in July 2017, Brazil has been working on its cooperation strategy both at the CPLP multilateral level and at the bilateral level, alongside each member country, in various sectors. The same logic applies to the Defense sector, as we will see below.

An analysis of the evolutionary process of the CPLP's Defense Component<sup>10</sup>, together with all the resulting actions in favor of the Community, shows that this structure is in constant need of adapting to the changes brought about by the 21<sup>st</sup> century's globalized and multipolar world. Diplomacy, foreign policy, sovereignty issues, national interests and external threats are increasingly present in the daily lives of countries. As corroborated by Bernardino (2016), the CPLP Defense component requires us to look towards the sea through the perspective of a genuinely geostrategic Defense cooperation model, able to encompass entire continents and oceans.

Specifically with regard to the Defense Sector, Brazil has sought to employ its collaborative military diplomacy alongside the Community in a proactive manner, as stated by Amorim (2016, p. 299, our translation): "... we attach great importance to this forum, the CPLP, specifically in the area of Defense." This strategy aims not only to contribute to the preservation of world peace, but, above all, to the maintenance of our sovereignty and the insurance of our interests in the Community's four oceans, with special attention to our immediate strategic surroundings in the South Atlantic.

<sup>9</sup> Available at: <<https://bit.ly/2JjXDEX>>. Access on: June 27, 2019.

<sup>10</sup> Available at: <<https://bit.ly/2XeEApp>>. Access on: June 27, 2019.

Moreover, we must raise awareness among the PALOP and East Timor that, similarly to Brazil, the strengthening of these countries' Defense Sectors generates important dividends, such as the safety of their maritime routes and seas, and the protection of their resources against the envious eyes of extra-regional powers. This protection also encompasses illicit transnational acts such as piracy—as exemplified by recent cases off the coast of Guinea-Bissau—and terrorism.

Reiterating this understanding, Amorim (2016, p. 37–38, our translation) states:

We have created a true belt of goodwill in our immediate surroundings, the reinforcement of which must be a permanent concern. This belt of goodwill allows Brazil greater freedom for [adopting] a universalist foreign policy, without the shackles that the eventual presence of threats on its borders would entail. This perception extends progressively to Africa. We wish to contribute specifically to the security of our partners in the South Atlantic Peace and Cooperation Zone. We need African countries to ensure that this ocean is a safe avenue for trade, free from piracy and organized crime.

Therefore, Brazil needs its African neighbors to be militarily strong in order to further strengthen the ZOPACAS, and defend the interests of each CPLP member country in their respective strategic environments.

Another important point is that, militarily speaking, Brazil's defensive capacities, followed by Portugal's, are far ahead those of other Portuguese language countries (mainly the PALOP and East Timor), which remain far below those of developed countries, suffering from a significant lack of systems, technology, training, staffing, and infrastructure.

Similarly, according to the Permanent Secretariat for Defense Affairs—which is responsible for coordinating Defense matters among countries in the bloc—to this date the CPLP's degree of joint interoperability within the Defense framework is conditioned only by the execution of “FELINO” Operations, which envisage the joint use of the bloc's Armed Forces in Humanitarian Aid Operations and Natural Disasters. That is, any potential future joint use of forces against threats to the sovereignty of any of the Community's countries is yet to be tested. When or if this type of operation becomes necessary, and depending on the type of threat, such joint action could be limited by a very low perception of security by the different societies of the Community, especially the Brazilian, considering that, as we have pointed out, the current defense capacity of CPLP member countries still presents several shortcomings.

The above point of view, although apparently discouraging, is supported by Amorim's perspective (2016, p. 300, our translation): “Obviously, it would be practically impossible to [conceive of] a unified defense [system] among CPLP countries, which does not prevent us from cooperating and reaching [similar] conclusions on how to cooperate in the defense of each CPLP country.”

Brazilian military cooperation alongside the CPLP has the integral support of our ‘Singular Forces.’ However, in view of the importance of the great sea that unites the Community, the work of the Brazilian Navy alongside other navies of the Community—especially after the establishment

of the “CPLP Strategy for the Oceans” in 2009—shall be our focus, as it has played a leading role, considering its numerous actions, partnerships, and future possibilities (FARIA, 2016).

In addition, it should be noted that cooperation within the Defense Sector also contributes to the promotion of Community development. Cooperation Agreements enable the development of the industrial bases of the defense sector, especially in Brazil, which is currently undergoing a considerable stagnation, resulting from political and economic crisis.

Undoubtedly, the majority of the navies and coast guards in the African CPLP and East Timor are still very young, and require training. The Brazilian defense cooperation, led by the Brazilian Navy, has been acting as a strong political-diplomatic “arm” for the affirmation of Brazil as the bloc’s protagonist. In this sense, Moreira (2008) has long pointed to the importance of South Atlantic security: bordered by new sovereigns clustered around the CPLP, this sea has become a ‘Moreno’ (Brown) Ocean, where Brazil’s intervention is sought after, expected, and indispensable. Thus, in the face of today’s globalized world and regardless of the possibility of new geopolitics imposed by the great (military and/or economic) powers for the four oceans encompassing the Community, the CPLP mega-state must establish a constant sea-faring presence. It must strengthen itself through its partnerships, within international organisms and, especially, within the theater of nations. It must preserve world peace, respecting the principles of non-intervention, reciprocal sovereignty, multilateralism, and the multipolarity of the contemporary world.

The safety of the maritime environment today is more unpredictable than ever before, with incidents and conflicts occurring on an unprecedented territorial scale. There is a recurring view that maritime security will only be achieved by strengthening international cooperation, mutual dialogue and multi-level responses involving intelligence, application of the legal framework and military capabilities. [...] No geopolitical change will be able to alter the relevance of the sea to the future of humanity. In the area of maritime security, navies will fulfill an increasingly vital role in their countries and on the world stage. The repercussions of oceanic issues are mounting, amplified by the interconnectedness of the globalized world (FARIA, 2016).

In this sense, the military cooperation currently being developed between Brazil and the other CPLP member countries—as established by the Defense Cooperation Protocol (Cabo Verde/2006<sup>11</sup>)—in addition to the understandings signed in the Minutes of the IV Navy Conference of the CPLP (Maputo/2015<sup>12</sup>), are evidence enough of the need for a strategic vision based on the strengthening of the Community’s Defense component.

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11 “Protocolo de Cooperação no Domínio da Defesa - Cabo Verde/2006.” Available at: <<https://bit.ly/2RPyw0x>>.

12 “Ata da IV Conferência das Marinhas da CPLP - Maputo/2015.” Available at: <<https://bit.ly/2Xi5pnN>>.

Thus, the CPLP has a great opportunity of presenting itself as a decisive contributor to the fulfillment of the ONDs mentioned in the END. We assess this matter in greater detail below, by confronting these objectives with actions that are currently under way and with potential future actions by Brazil alongside the Community.

With the above said, it is clear that, within the political-diplomatic theater, the CPLP adjusts perfectly into certain PND fundamentals:

- 2.1.5 The National Defense Policy has as its principles the peaceful settlement of disputes, the promotion of international peace and security, multilateralism and South American integration, as well as the country's projection in the concert of nations and the expansion of its insertion in international decision-making processes, which requires a permanent effort of diplomatic-military articulation.
- 2.1.6 In this sense, without disregarding the global sphere, it establishes the Brazilian strategic environment as a priority area of interest; this includes South America, the South Atlantic, the countries of the West African coast, and Antarctica.
- 2.1.7 ... In view of their historical ties and cultural affinities with Brazil, the Portuguese language countries deserve special attention from cooperation efforts in the field of Defense. ... (BRASIL, 2016b, p. 6, our translation).

Considering the ONDs established by the PND, we can now verify which are identified with the CPLP:

- I. Brazil's National Defense Objectives are the following:
- II. To ensure sovereignty, national heritage and territorial integrity ...
- III. To ensure a Defense capacity adequate to the fulfillment of the Armed Forces' constitutional missions ...
- IV. To safeguard the [country's] people, property, resources and national interests abroad ...
- V. To contribute to the preservation of national cohesion and unity ...
- VI. To contribute to regional stability and international peace and security ...
- VII. To contribute to the increase of Brazil's projection in the concert of nations and its insertion in international decision-making processes ...
- VIII. To promote productive and technological autonomy in the area of defense ...
- IX. To expand the involvement of Brazilian society in National Defense affairs ...

(BRASIL, 2016b, p. 6, our translation).

Among the abovementioned ONDs, objectives I, II, III, V, VI, VII, VIII are potentially aligned with the CPLP, which can contribute in their attainment, as we will see. OND IV was

not selected because it refers to responsibilities that are exclusively Brazilian, referring to internal strategies and strategic actions.

In order to more reliably verify whether the CPLP is a potential block for the achievement of Brazil's ONDs, we must confront the selected ONDs with past and future Brazilian actions alongside the Community.

In doing so, we can pair them with their respective defense strategies (*Estratégias de Defesa* – EDs) and strategic defense actions (*Ações Estratégicas de Defesa* – AEDs), while establishing some baseline parameters.

OND-1: TO ENSURE SOVEREIGNTY, NATIONAL HERITAGE AND TERRITORIAL INTEGRITY.

ED-2: To strengthen the country's deterrence capacity.

This strategy is related to developing, refining and consolidating the country's conditions to discourage any hostile action against its sovereignty, interests, and aspirations ...

AED-9: To develop capabilities to monitor and control airspace, cyberspace, territory, waters in the Brazilian jurisdiction and other areas of interest. (BRASIL, 2016b, p. 33–34, our translation).

According to Faria (2016), the Brazilian Navy's cooperation in building an architecture for a PALOP and East Timor jurisdictional water monitoring and control system—a Long-Range Identification and Tracking (LRIT) system and a Vessel Traffic Management Information System (VTMIS), for instance—may contribute to the monitoring of merchant traffic and of national-interest areas and maritime. A VTMIS in particular could lead to real-time exchange of information with other member countries.

In this sense, the CPLP has potential conditions to contribute to the achievement of OND-1, by means of ED-2 (AED-9).

OND-2: TO ENSURE A DEFENSE CAPACITY ADEQUATE TO THE FULFILLMENT OF THE ARMED FORCES' CONSTITUTIONAL MISSIONS ...

ED-5: Budgetary regularity.

Budgetary regularity allows the Defense Sector to better plan the use of its financial resources, rationalizing this process and making defense spending more efficient ...

AED-26: To allocate an adequate percentage of the GDP to defense spending ... (BRASIL, 2016b, p. 34–35, our translation).

Also, as we have discussed previously, Brazil has been playing a fundamental political-diplomatic role in projecting the Community, especially with the proactive participation of

the bloc in multilateral organisms and forums, such as the WTO. This participation has led to important victories for Brazil and developing countries as a whole.

Especially with regard to Brazilian economic interests, CPLP support in the WTO has been extremely relevant, as Brazil has been achieving significant victories and removing obstacles that hinder the development of certain economic sectors. This has made Brazilian products more competitive in the international market, as recognized by Caulyt (2014, our translation): "Brazil is one of the most active developing nations in the organization's dispute settlement system and, with victories against rich countries' protectionist policies, it has gained space for its products." Such victories favor our export activities, contributing to the effort of a generating a trade surplus and increasing our gross domestic product (GDP). This may also allow for a greater generation of financial resources to be invested in important economic sectors. Depending on the government policy currently in effect, this dynamic may favor investments in the Defense Sector.

Therefore, the CPLP has the potential to contribute, even indirectly, to the achievement of OND-2, by means of ED-5 (AED-26).

OND-3: TO SAFEGUARD THE [COUNTRY'S] PEOPLE, PROPERTY, RESOURCES AND NATIONAL INTERESTS ABROAD

ED-2: To strengthen the country's deterrence capacity.

This OND concerns the development, improvement and consolidation of the country's conditions to discourage any hostile action against its sovereignty, interests, and aspirations.

AED-31: To develop capacities to preserve at-risk nationals and safeguard Brazilian property, resources and interests abroad, including maritime communication lines ...

AED-33: To increase the participation of the Armed Forces in operational exercises with other countries ...

AED-35: To develop capacities to maintain the safety of maritime communication lines where national interests are concerned ...

ED-7: To effect defense-related diplomatic actions.

This strategy refers to activities stemming from partnerships between the Brazilian Defense Sector and foreign counterparts, aimed at strengthening trust, friendships, mutual knowledge and developing an environment of camaraderie and cooperation.

It also considers the relationship of the Defense Sector with other state and non-state agencies and with other countries' societies.

AED-36: To improve our relationship with other countries' Defense Sectors.

AED-37: To increase naval presence actions in support of diplomatic actions. (BRASIL, 2016b, p. 36-37, our translation).

Through Brazilian military cooperation with the CPLP, the Brazilian Navy's work alongside member countries' navies has functioned as a major political-diplomatic "arm." The leadership of the Brazilian Navy is exemplified by numerous actions such as "FELINO" Joint Operations, in addition to other bilateral Joint Naval Operations in the CPLP's sphere, as well as the strategic partnerships described by Faria (2016).

Likewise, such cooperation from the Brazilian Navy contributes, above all, to the maintenance of our sovereignty and the preservation of our interests in the four seas—especially in our strategic surroundings (the South Atlantic). This cannot but promote awareness on the part of the PALOP and East Timor that, similarly to what takes place in Brazil, the strengthening of their Defense Sectors can generate important dividends, such as the safety of their routes and maritime areas and the protection of their wealth against the envious interests of extra-regional powers. Notable signs of these interests are the permanent presence of England and France in the South Atlantic, and the significant increase in Chinese presence in the Lusophone area, with its sea strategy relying heavily on the American and African Continents. CPLP cooperation is also important for preventing or protecting against illicit transnational acts such as piracy (as in recent cases off the coast of Guinea-Bissau) and terrorism in its most different forms.

Specifically regarding the *Oceano Moreno* (Brown Ocean), an expression coined by Professor Adriano Moreira, it is evident that Brazil needs its African neighbors, especially the CPLP member countries, to be militarily strong. On that basis, they can increasingly contribute to the strengthening of ZOPACAS, defending the bloc's common interests.

Therefore, the CPLP directly contributes to the achievement of OND-3 by means of ED-2 (AED-31; AED-33; and AED-35) and ED-7 (AED-36 and AED-37).

OND-5: TO CONTRIBUTE TO REGIONAL STABILITY AND INTERNATIONAL PEACE AND SECURITY [...]

ED-13: Work in international organizations.

This objective concerns Brazil's activities in international fora and organizations, together with the participation of Armed Forces and police contingents in humanitarian missions and peace operations under the mandate of multilateral organizations.

AED-50: To intensify work in multilateral fora and inter-regional mechanisms.

AED-52: To develop the Armed Forces' capabilities, so they may assume increasing responsibilities in international operations under the mandate of multilateral agencies (BRASIL, 2016b, p. 39, our translation).

Although "FELINO" Operations are still a CPLP-level exercise that predicts the joint use of the bloc's Armed Forces in humanitarian aid and natural disasters, the improvement of this exercise so as to increase the defense capacity and training of member countries' Armed Forces can create the conditions for an eventual CPLP force to be employed under the guidance of the United Nations, should the latter require it.

Likewise, in the political-diplomatic field, Brazil has also played a fundamental role, acting as leader of the CPLP and projecting it internationally, especially with the proactive participation of the bloc in multilateral organisms and forums such as the UN. It is worth pointing out that our country has made efforts to reformulate this organization, even though it is still far from achieving its goal of becoming a member of the UN Security Council.

Above all, the international-relations efforts of Brazilian foreign policy and diplomacy show that, since the bloc presents itself as a mega-state, it must increasingly strengthen itself in the pursuit of the Community's common interests. This makes its building by Brazil a relevant strategy for the pursuit of Brazilian interests.

In this sense, the CPLP contributes significantly to the achievement of OND-5, by means of ED-13 (AED-50 and AED-52).

[...] OND 6: TO CONTRIBUTE TO THE INCREASE OF BRAZIL'S PROJECTION IN THE CONCERT OF NATIONS AND ITS INSERTION IN INTERNATIONAL DECISION-MAKING PROCESSES

ED-14: Multilateralism-based action.

Refers to the Defense Sector's action in applying Brazil's political stance of multilateralism in international relations, international operations, and cooperation with other countries and foreign organizations. This aims to expand the participation of other countries in the discussion of global interest issues, conferring greater legitimacy to decisions.

AED-52: To develop the Armed Forces' capabilities, so they may assume increasing responsibilities in international operations under the mandate of multilateral agencies.

AED-53: To intensify the Defense Sector's role in international organizations.

ED-12: To promote international cooperation.

This strategy refers to activities stemming from partnerships between the Brazilian Defense Sector and foreign counterparts, aimed at strengthening trust, friendship, and mutual knowledge, while developing an environment of camaraderie and cooperation.

AED-47: To foster international mutual trust and security.

AED-48: To step up defense exchanges and agreements with other countries.

AED-49: To intensify the practice of international operations, unilaterally or in plurilateral arrangements; to intensify cooperation initiatives around defense interests.

AED-50: To intensify work in multilateral fora and inter-regional mechanisms. (BRASIL, 2016b, p. 40, our translation).

As previously mentioned, Brazilian cooperation with the CPLP has proven an extremely valuable strategy by our diplomacy and foreign policy. Common cultural, ethnic and linguistic traits have led to several resilient and long-lasting agreements and projects to promote exchange and the development of each member nation across various sectors. This is especially true for the PALOP and East Timor, with CPLP cooperation leading to improvements in education; health; teaching of the Portuguese language; public safety; agriculture; environment, etc. This scenario has contributed to Brazil's affirmation as a leading actor of the entire bloc.

The country has been working on the CPLP strategy as a means for the creation of a genuine mega-state, able to make its presence felt in the concert of nations, and strengthening itself through its bilateral and multilateral partnerships with international organisms. The common tone of this work has been the preservation of world peace, respect to countries' sovereignty, multilateralism, and the increase of Brazil's international projection in a globalized and multipolar environment.

The contribution of Brazilian defense cooperation in the CPLP is a clear portrayal of Brazil's overall international cooperation model. Such a contribution has direct repercussions on our interests: the strengthening of ZOPACAS, for instance, promotes the preservation of peace in the South Atlantic, keeping it free of nuclear weapons and other weapons of mass destruction.

Moreover, as described by Faria (2016), in addition to Operation "FELINO," the country has also carried out other international operations in the interest of defense. These operations resulted from bilateral agreements with the PALOP.

In this sense, the justifications presented for the CPLP's potential as a contributor to the fulfillment of OND-5 also apply to OND-6, realized by means of ED-12 (AED-47; AED-48; AED-49 and AED-50) and ED-14 (AED-52 and AED-53). This allows Brazil to increasingly project itself onto the international scene, sustaining an active voice in international decision-making processes.

#### OND-7: TO PROMOTE PRODUCTIVE AND TECHNOLOGICAL AUTONOMY IN THE AREA OF DEFENSE

ED-15: Promoting the sustainability of the Defense sector's industrial base ... This strategy seeks to provide stable conditions for the research, development, production and sale of Brazilian defense products, allowing for sustainability in the defense production chain, even if this sustainability has to rely on special legal, regulatory and tax regimes.

AED-62: To promote exports from the defense sector's industrial base.

AED-63: To promote the increased use of local materials in products of the defense sector's industrial base.

ED-16: Strengthening of the Defense Science and Technology Area.

This strategy's aim is the development and consolidation of defense research, promoting the absorption, by the productive chain, of indispensable knowledge in order to foster the gradual reduction of our dependence on external technology ...

AED-71: To encourage partnerships and exchanges in the research of defense technologies.

AED-72: To acquire technologies that promote an increase the national technological content of our defense products (BRASIL, 2016b, p. 41–42, our translation).

In addition, it should be noted that cooperation within the Defense Sector can also contribute to the Community's development. Cooperation Agreements enable the development of the defense sector's industrial base, especially in Brazil, which is currently undergoing a considerable stagnation, resulting from political and economic crisis.

The military cooperation between Brazil and the CPLP is already showing signs of potentiality and hope for what the Community can offer in terms of resuming the growth of the Brazilian industrial segment, especially in the Naval Sector (albeit in an incipient way). A sign in this direction is the possible purchase of speedboats and small patrol vessels by PALOP and East Timor.

Meanwhile, the export potential of defense products has in the CPLP a very promising market environment. The very presence of a Brazilian Navy Sea and War Captain (CMG) in East Timor, currently serving as Advisor to the Timorese Defense Minister in the deployment of the Maritime Authority, is also concretely presented as a strategic vector of future possibilities for the country's naval sector, since East Timor's naval component is still in formation. Besides, PALOP Defense Sectors are also potential buyers, considering their very young navies.

Likewise, the arc of knowledge<sup>13</sup> defined by the Ministry of Defense also includes the Asian region as an extremely important pole in regards to trade opportunities for Defense Products (PRODE) and, consequently, the search and acquisition of new technologies.

This intensification of Brazil's military cooperation with East Timor, via the CPLP, may help establish a more effective presence on the Asian continent. One vector for that development is the Community's liaison with the Macao Special Administrative Region, which should facilitate Brazil's entry into Asia through the PRC, with which Brazil has a close relationship.

In this sense, the CPLP has concrete potential to become an extended arm of the Brazilian presence in Europe, Africa and Asia, and can contribute to the achievement of OND-7 by means of ED-15 (AED-62 and AED-62) and ED-16 (AED-71 and AED-72).

#### OND-8: TO EXPAND THE INVOLVEMENT OF BRAZILIAN SOCIETY IN NATIONAL DEFENSE AFFAIRS

ED-17: To promote the theme of defense in the educational environment.

This strategy refers to actions aimed at stimulating discussion about National Defense in the country's educational activities, at various levels, promoting greater awareness of the theme's importance.

AED-75: To work towards the insertion of the defense theme in the national education system.

AED-76: To perform, promote, and encourage teaching activities related to National Defense topics ...

AED-78: To support initiatives in recognition of defense as a subarea of knowledge alongside graduate research funding agencies ...

ED-18: Use of Social Media.

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13 Available at: <<https://bit.ly/2KIQwcs>>. Access on: June 27, 2019.

This strategy refers to actions for the interaction between the Defense Sector and the Brazilian society, enabling Brazilian citizens to learn about the activities performed by the Ministry of Defense and the Armed Forces, and promoting a genuine, realistic and legitimate image of these organizations.

AED-80: To develop and plan institutional promotion activities.

AED-81: To promote the visibility of Defense Sector actions as a factor in enlightening decision-makers and public opinion regarding defense issues (BRASIL, 2016b, p. 42–43, our translation).

On May 11, 2017, an opinion defending the offering of Defense studies in Brazilian Universities and Institutes of Higher Education was made official (BRASIL, 2017a). Such a formalization will allow this area of knowledge to become part of the educational background of civilian and military specialists, further consolidating our academic environment, and stimulating studies on national defense issues to also take place outside of military education institutions. This should peak the interest of young people, broadening their knowledge on topics of paramount importance related to our PND and END.

It is our understanding that the CPLP should be part of these research initiatives. This will provide the bloc with greater visibility, allowing our society to learn about the political-strategic architectures that Brazil seeks to build, and also about the defense activities performed by our Ministry of Defense and Armed Forces. Explanations of the role of the CPLP and its relations with ONDs I, II, III, V, VI and VII, for instance, contribute to a greater presence of the country on the international scene, which can thus maintain a constant pursuit of its interests.

In this sense, the CPLP also has real potential to contribute to the achievement of OND-8 by means of ED-17 (AED-62 and AED-62) and ED-168 (AED-71 and AED-72).

#### 4 Conclusion

Today's international conjuncture has shown that globalization, a heritage of the great European navigations, has undergone phenomenal transformations, mainly as a result of technological developments that are bringing different parts of the world closer and closer. However, globalization is also marked by a growing asymmetry in the power relations between major states and developing countries. This applies not only to the economic sphere, but also to culture, politics and finances.

The end of the Cold War, in fact, marked the closure of the ideological bipolarity between West and East, driving the rise of the US as an economic and military power, as well as the prevalence of capitalism over socialism. A unipolar world order thus emerged, led by the US, who continue to strategically pursue their interests, despite the growing influence of new and powerful actors on the global stage, such as China.

The emergence of new regionalizations and partnerships, and the consequent formation of blocs among the least industrialized countries from the 1990s onward, provided a counterbalance to the domination of developing countries by the US together with other strong economies. Mega-states were created to try and survive the dire consequences of globalization, which stem from the inexorable ability of the strongest countries to penetrate the weakest, generating an involuntary dependency relationship that is the hallmark of the entire globalization process. This strategy has been successful in allowing such mega-states to effectively assume a political stance of some weight in the international concert. This takes place not only by means of bilateral and multilateral partnerships, but also in forums and international organizations, where weaker countries can ensure the defense of their interests, even if indirectly. Such a framework has also allowed these countries to cope with the dominant US economy, demonstrating that the principle of multipolarity should prevail.

The accurate understanding by Brazil of the dynamism made possible by globalization allowed the country to establish partnerships and regional and international blocs with South American, African and Asian countries. Within this strategic line of thought, Brazil realized that the historical, linguistic, ethnic and cultural foundations shared by over 230 million inhabitants of the Portuguese language countries could and should constitute a platform for the emergence of a mega-state community, capable of acting strategically in defense of its members' national interests. The formation of this community effectively occurred in 1996, with the creation of the CPLP.

Despite the immense geographical space that surrounds the CPLP member countries (4 continents and 3 oceans), nowadays the immense technological transformations resulting from globalization allow us to shorten distances and bring far-away nations together. However, as we have discussed, the Community encompasses different, unevenly distributed stages of globalization, especially in the PALOP and East Timor, which still require considerable investment and development.

In the case of the CPLP, we have seen the main reasons for the bloc's constitution were not economic in nature. This despite promising economic prospects in several sectors, in which Brazil has sought to follow through with the internationalization of its companies, also establishing bilateral, multilateral, and cooperation trade agreements.

Corroborating this understanding, the bloc's political architecture has provided Brazil with significant gains alongside international organizations such as the WTO, contributing to the development of important sectors of our economy, such as the agricultural sector. This virtuous dynamic has also benefited other developing countries. Similarly, Brazil's goal of projecting itself onto the international scenario, drawing on the Community's own overall projection, is an important foundation for a more proactive participation of the bloc and of Brazil itself within the UN. In this sense, it is worth remembering that our country has made significant efforts to reformulate the UN itself, although it remains far from achieving the goal of Security Council membership.

The maritime universe of the CPLP is also of considerable importance, not only because it involves areas within the Brazilian strategic environment, such as the South Atlantic, but also because defense and security aspects are all too important in face of the external interests in the access to raw materials and natural resources within this vast maritime area (not to mention threats of illicit transnational acts, all of which have already been mentioned, and which may interfere with the sovereignty of the countries of the Community). In regards to military power, Brazil is considerably advanced, followed by Portugal. However, the defensive capacities of other CPLP member countries (especially in the PALOP and East Timor) remain far below those of developed countries. Such capacities are in dire need of more resources, systems, technology, training, staff, infrastructure, increased inter-operability and, above all, government investments.

Furthermore, it is noteworthy that a possible geopolitical change in the CPLP maritime universe, especially in the South Atlantic region, may materialize in the future, as the US is shifting its axis of geopolitical concern to the Asia-Pacific Region. This is a reaction to the Chinese soft-power strategy, with its growing rapprochement with Latin America and Africa by means of infrastructure investments in various countries. It is also a response to a well-thought out maritime strategy for the expansion of Chinese sea-faring presence, access to raw materials, and natural resources. The technological prospect of new freight ships (*New Panamax* and *Triple-E*) may be integral to that strategy, and could lead to a new international maritime freight order, together with potentially increased piracy in focal areas.

Regardless of the strategies that the Chinese and American economic and military powers may adopt, or even those arising from the permanent European presence in the South Atlantic, in addition to having strong partnerships with these countries—especially China and other BRICS—Brazil must understand that the CPLP can play an important role as a strategic platform for our national interests, especially in regards to strengthening the ZOPACAS. Our country's peaceful nature only reinforces this proposition of multiple partnerships and agreements.

In the context of international relations, in a highly globalized, post-Cold War world, the Brazilian work within the CPLP has continuously stood out, as predicted in our PND. This has provided Brazil with a leading role in the bloc. Political-diplomatic action and a sense of mutual cooperation have been the strategy employed by the Brazilian government towards the CPLP, which has allowed it to identify potentialities of the bloc in contributing to the attainment of the ONDs predicted by the END.

In this sense, Brazilian cooperation with the Community, especially in the field of Defense and with special emphasis on the Brazilian Navy, has indeed shown that the CPLP is a potential block for the achievement of our ONDs. All in all, with the analysis carried out here, several elements justify the continued importance of the Community for Brazil. In mathematical terms, the CPLP may contribute to the direct or indirect achievement of 7 out of 8 ONDs, a percentage of 87.5%.

Finally, in light of all the abovementioned considerations, Brazil must increasingly prepare itself for the challenges of the 21<sup>st</sup> century, caused by the constant evolution of the globalization process and its asymmetrical power effects. Thus, more than ever, our country can and should expand its relationship with this strategic national-defense platform, the CPLP, attributing due importance to the continuation and improvement of existing defense cooperation agreements with its member countries, especially near the “Lusophone Seas.” As argued by Amorim (2016, p. 308, our translation):

Contrary to unfounded expectations that were in vogue after the end of the Cold War, geopolitics have not been surpassed in international affairs. Regrettably, the perpetual peace envisioned by Immanuel Kant has not yet become a reality.

## References

ALBUQUERQUE, E. S. A geopolítica da dependência como estratégia brasileira de inserção no Sistema Internacional. **OIKOS**, Rio de Janeiro, v. 9, n. 1, p. 67-82, 2010. Available at: <<https://bit.ly/2LoFYie>>. Access on: Apr. 7, 2017.

ALDEIA GLOBAL. *In: DICIONÁRIO InFormal. [s. l.]: Dicionário InFormal*, 27 fev. 2013. Available at: <<https://bit.ly/2RDlaEE>>. Access on: May 7, 2017.

ALMEIDA, K. S. **A comunidade dos países de língua portuguesa**: os benefícios e as ações de natureza estratégica do Brasil sob o ponto de vista da Teoria dos Jogos. 2003. 244 f. Dissertação (Mestrado em Administração e Desenvolvimento Empresarial) – Universidade Estácio de Sá, Rio de Janeiro, 2003.

AMORIM, C. **A grande estratégia do Brasil**: discursos, artigos e entrevistas da gestão do Ministério da Defesa (2011-2014). Brasília, DF: Fundag, 2016.

AZEVEDO, B. S. Desenvolvimento econômico. **Trabalhos Gratuitos**, [s. l.], 4 maio 2015. Available at: <<https://bit.ly/31TAjq2>>. Access on: May 7, 2017.

BERNARDINO, L. M. B. A segurança marítima no seio da CPLP: contributos para uma estratégia nos mares da lusofonia. **Nação e Defesa**, Lisboa, n. 128, p. 41-65, 2011. 5ª série. Available at: <<https://bit.ly/2ZV6yDh>>. Access on: Mar. 31, 2017.

BERNARDINO, L. M. B. **Uma nova visão estratégica da defesa para a CPLP**. Lisboa: CEI, 2016. Available at: <<https://bit.ly/2LqadoD>>. Access on: Mar. 20, 2019.

BEZERRA, J. Brics. **Toda Matéria**, [s. l.], Jan. 10, 2018. Available at: <<https://bit.ly/2XaiioA>>. Access on: Jun. 27, 2019.

BRASIL. [Constituição (1988)]. **Constituição da República Federativa do Brasil de 1988**. Brasília, DF: Presidência da República, 5 out. 1988. Available at: <<https://bit.ly/1bJYlGL>>. Access on: Mar. 30, 2017.

BRASIL. Ministério da Defesa. **Livro Branco de Defesa Nacional**. Brasília, DF: Ministério da Defesa, 2016a. Versão sob apreciação do Congresso Nacional (Lei Complementar 97/1999, Art. 9º, § 3º). Available at: <<https://bit.ly/2RFpMdy>>. Access on: Mar. 28, 2017.

BRASIL. Ministério da Defesa. **Política Nacional de Defesa, Estratégia Nacional de Defesa**. Brasília, DF: Ministério da Defesa, 2016b. Versão sob apreciação do Congresso Nacional (Lei Complementar 97/1999, Art. 9º, § 3º). Available at: <<https://bit.ly/2UdEBby>>. Access on: Mar. 29, 2017.

BRASIL. Ministério da Defesa. Portaria Normativa nº 64, de 8 de novembro de 2016. Aprova a Diretriz de Defesa para a Área Internacional (DIRDAI). **Diário Oficial [da] União**: seção 1, Brasília, DF, Nov. 8, 2016c.

BRASIL. Ministério da Educação. Assessoria de Comunicação Social. Instituições de ensino poderão incluir temas da Estratégia de Defesa em seus currículos. **Ministério da Educação**, Brasília, DF, 11 maio 2017a. Available at: <<https://bit.ly/2J4724p>>. Access on: Jun. 25, 2017.

BRASIL. Ministério das Relações Exteriores. **Zona de paz e cooperação do Atlântico Sul**. Brasília, DF: Ministério das Relações Exteriores, 2017b. Available at: <<https://bit.ly/2YrvvGb>>. Access on: Jun. 27, 2017.

CABRAL, S. **Brasil megaestado**: nova ordem mundial multipolar. Rio de Janeiro: Contraponto; Faperj, 2004.

CANAL da Nicarágua: a peça chave do plano de expansão da China. **Epoch Times**, New York, 19 fev. 2016. Available at: <<https://bit.ly/2YjOnae>>. Access on: Jun. 4, 2017.

CARDIM, C. H.; CRUZ, J. B. (org.). **CPLP**: oportunidades e perspectivas. Brasília, DF: Fundag, 2002. Available at: <<https://bit.ly/2xsLQys>>. Access on: Mar. 28, 2017.

CAULYT, F. Brasil é um dos mais ativos na OMC e ampliou mercados em 20 anos. **DW Brasil**, [s. l.], 16 abr. 2014. Available at: <<https://bit.ly/2SOU8KI>>. Access on: Apr. 15, 2017.

COSTA, D.; SILVA, F. C. T. **Mundo latino e mundialização**. Rio de Janeiro: Faperj; Mauad, 2004.

DIAS, I. M. T. O Brasil e a cooperação Sul-Sul e triangular na CPLP: reflexões sobre o Brasil como promotor do desenvolvimento à luz da Teoria dos Papéis. In: ENCONTRO NACIONAL DA ASSOCIAÇÃO BRASILEIRA DE RELAÇÕES INTERNACIONAIS, 5., 29-31 jul. 2015, Belo Horizonte. **Anais** [...]. Belo Horizonte: Abri, 2015. Análise de Política Externa. Available at: <<https://bit.ly/2KGC0lf>>. Access on: Apr. 3, 2017.

FARIA, E. P. A cooperação da Marinha do Brasil com as demais marinhas da CPLP. In: SEMINÁRIO A COOPERAÇÃO NA ÁREA DE DEFESA ENTRE AS FORÇAS ARMADAS DA CPLP, 2016, Rio de Janeiro. **Anais** [...]. Rio de Janeiro: Escola de Guerra Naval, 2016.

G7. In: WIKIPEDIA: the free encyclopedia. [San Francisco, CA: Wikimedia Foundation, 2019]. Available at: <<https://bit.ly/2vKQW9T>>. Access on: Jun. 27, 2019.

GALA, I. Os pilares de atuação da CPLP e os interesses do Brasil. **Ministério das Relações Exteriores**, Brasília, DF, 2011?. Available at: <<https://bit.ly/2YuJScO>>. Access on: Apr. 11, 2017.

MOREIRA, A. Portugal e a geopolítica da interculturalidade. In: LAGES, M. F.; MATOS, A. T. (coord.). **Portugal**: percurso de interculturalidade. Lisboa: Acidi, 2008. p. 292-338. (Desafio à Identidade, 4). Available at: <<https://bit.ly/2KFXfUj>>. Access on: Mar. 20, 2019.

MOTA, M. V. P. C. **Brasil, Portugal e a CPLP**: possíveis estratégias internacionais no século XXI. 2009. 174 f. Dissertação (Mestrado em Ciência Política) – Faculdade de Filosofia, Letras e Ciências Humanas, Universidade de São Paulo, São Paulo, 2009. Available at: <<https://bit.ly/2FBGXrE>>. Access on: Apr. 4, 2017.

OLIVEIRA, C. A. A CPLP como instrumento de Política Externa brasileira e de desenvolvimento para os PALOP. **Revista Perspectiva**, Porto Alegre, v. 8, n. 15, p. 31-53, 2015. Available at: <<https://bit.ly/2RDsd04>>. Access on: Apr. 25, 2017.

PANAMAX and new Panamax. **Maritime Conector**, Rijeka, 28 jun. 2012. Available at: <<https://bit.ly/31We5DV>>. Access on: Jun. 27, 2017.

SANTOS, J. C. **Dimensões da globalização**. Rio de Janeiro: Cebres, 2000.

SANTOS, M. Política externa pode ser ferramenta poderosa em momentos de crise. **R7**, São Paulo, 2015. Available at: <<https://bit.ly/2JgkCAC>>. Access on: Apr. 27, 2019.

SARAIVA, J. F. S. **Comunidade dos Países de Língua Portuguesa – (CPLP) Solidariedade e Ação Política**. Brasília: IBRI, 2001. 203 p.

SARAIVA, J. F. S. **A África no século XXI**: um ensaio acadêmico. Brasília, DF: Funag, 2015.

SOARES, C. M. **Diretriz área internacional em defesa**. Destinatário: Flávio de Jesus Costa. [S. l.], Apr. 18, 2017. 1 e-mail.

VELOSO, I. O Fórum Macau e a CPLP nas estratégias de Cooperação Sul-Sul da China e do Brasil na África. **Perspectivas**, São Paulo, v. 45, p. 41-62, jan./jun. 2015. Available at: <<https://bit.ly/2LnYRl3>>. Access on: Apr. 13, 2017.

VERGARA, S. C. **Projetos e relatórios de pesquisa em administração**. 7. ed. São Paulo: Atlas, 2007.



# The territorial control strategy of the Islamic State of Iraq and the Levant (2014-2015)

*La estrategia de control territorial del Estado Islámico de Irak y el Levante (2014-2015)*

**Abstract:** The article discusses the urban strategy of the Islamic State of Iraq and the Levant (2014-2015) in the region of its primary action between the years 2014 to 2015. The article analyzes how the organization uses its dominion over territories to build the territorial bases of the self-proclaimed caliphate, provide logistical points that allow the control of new localities, and institutionalize their presence in the region of Iraq and Syria.

**Keywords:** Islamic State. War. Syria. Iraq.

**Resumen:** El artículo aborda la estrategia urbana del Estado Islámico de Irak y el Levante (2014-2015) en la región desde su actuación principal entre 2014 y 2015. Se pretende analizar cómo la organización ejerció su dominio sobre los territorios para construir las bases territoriales del proclamado califato, al proporcionar puntos logísticos que la permitieron controlar nuevos locales e institucionalizar su presencia en la región de Irak y de Siria.

**Palabras clave:** Estado Islámico. War. Siria. Irak.

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## 1 Introduction

The role of the so-called Islamic State of Iraq and the Levant<sup>1</sup> (ISIL) has become a growing threat to governments not only in the West but also in Middle East regimes. The broad coalition that, led by the United States, has used airpower to attack extremist positions, particularly in Syria and Iraq, is representative of this situation. From the second half of 2015, twelve nations have been fighting ISIL's presence in the region, including countries directly affected by the expansion of caliphate warriors such as Saudi Arabia, Jordan and Turkey.

This perception that ISIL is an existential threat to the Westphalian international system based on the nation-state paradigm is largely due to the organization's expansion strategy since, in June 2014, Abu Bakr al-Baghdadi, claiming to be Muhammad's offspring, proclaimed the formation of an Islamic caliphate and placed himself as the supreme head of this enterprise. This proclamation, emblematic for the jihadist scene in the Middle East, came, however, only after some territorial gains, including the capture of Mosul, Iraq's second most populous city.

Within this context, this article studies the urban strategy of the ISIL group in the region of its primary activity between 2014 and 2015. The objective is to analyze how the organization used its domain of Syrian and Iraqi cities to build the territorial bases of the self-proclaimed caliphate, to provide the logistical points that allowed the control of new localities, in addition to institutionalizing its presence in the region of Iraq and Syria.

By achieving very significant territorial control of cities and their surroundings, the article's hypothesis suggests that the support for ISIL's strength and resilience, despite coalition air strikes, was the dominance exercised in Iraq's and Syria's urban centers.

It should be noted that ISIL territorial control must be understood as a process that has ceased in time, since, by the end of 2017, Russia, the Iraqi government and the US military announced that the insurgent group no longer controlled any city in Russia, Syria and Iraq.

For the purposes of this study, therefore, a timeframe is proposed beginning with the conquest of Raqqah in Syria, and is limited to the fall of Ramadi in Iraq, comprising 2014 and 2015. This is a period in which there was a rapid and aggressive expansion of the territory controlled by the group, rivaling the 2016-2017 biennium when the loss of land greatly weakened the organization.

Therefore, this article analyzes a phenomenon limited to a certain period of time, between 2014 and 2015 that we could consider as the "pinnacle" of ISIL activities, since it marks the group's conquest and maintenance of territories in Syria and in Iraq. It is a period that portrays how the weakness of national states like Syria and Iraq allowed the strengthening of an organization that sought to replace these states with another governmental configuration, the caliphate.

<sup>1</sup> The Arabic name of ISIL is ad-Dawla al-Islamiya fi'l-Iraq w'ash-Sham. "Sham" has been commonly translated as "Levant" or "Syria." It turns out, however, that "Sham" has a broader meaning, a territory that can be considered to be "Greater Syria" and made up of Lebanon, Jordan, Palestine, and present-day Syria (HAMDAN, 2016).

## 2 The al-Zarqawi map

ISIL's urban strategy is rooted in the period of the Sunni insurgency in Iraq following the Anglo-American invasion and the overthrow of the Saddam Hussein regime in 2003. One of the main leaders of this insurgency was Abu Musab al-Zarqawi, a Jordanian from the Sunni branch of Islam who, with Osama bin Laden's acquiescence, established a plan to expel the Western military forces of Iraq (LISTER, 2014).

From unconventional military tactics associated with so-called irregular conflicts, al-Zarqawi became head of the then-called Al-Qaeda in Iraq (AQI) group, an affiliate of the terrorist organization structured under the leadership of the Saudi extremist. One of the goals of al-Zarqawi's group, as well as bin Laden's organization, was the establishment of a caliphate that would include Iraqi territory and unite the primarily Sunni Islamic community (ZIMMERMAN, 2013).

Caliphate is understood to be an Islamic state configuration, dominated by a supreme ruler in political and religious terms (FUKUYAMA, 2013). Caliphate, thus, can be understood as an Islamic state led by the so-called caliph, which necessarily must have descent with Muhammad and be considered a kind of successor to the Prophet (LIEBL, 2009). According to Napoleoni (2015), the Ottoman Caliphate that lasted from 1453 to 1924 was one of the most important, expanding to Europe from the exercise of the power of the Turkish sultans. In this article, therefore, when we speak of the caliphate, we are referring to a state configuration that would erode the present borders of Middle Eastern countries.

To fulfill such a broad goal of re-establishing the caliphate, AQI has invested in tension between the Sunni and Shiite branches of the Iraqi population. Even though they are minority (30%), Sunnis have always been tied to power, whether in the monarchical regime or in Saddam Hussein's dictatorship (POLK, 2006). The Shiites (60%), in turn, remained oblivious to the positions of command power in the secular bureaucracy as well as in the military corporations. From the Anglo-American intervention in 2003, there is a reconfiguration of these forces, and Shiites now control the most important positions of the first post-Saddam government (MABON; ROYLE, 2017).

This change in the internal geometry of power in the country went further, and, in 2004, the well-known "Bremmer laws"<sup>2</sup> decreed the demobilization of the Iraqi army, including the so-called Republican Guard, and put the regime's former support party, the secular-tinted Baath Party, underground. Such norms, established by an alien agent to the Iraqi context, produced a serious crisis, as the Sunni elements linked to Saddam — bureaucrats, politicians and military — came to be considered as enemies of the eventual new Iraq that would emerge with the support of Washington. From day to night, the country saw the erosion of its military and police forces, with clear damage to public safety.

Most important, however, was the resentment created over the clear alienation of Sunnis in the Iraqi configuration freed from the authoritarian regime of the Hussein family.

<sup>2</sup> In reference to the first US administrator in Iraq after the intervention, the diplomat Paul Bremmer.

Shiites, as well as, partly, Kurds<sup>3</sup>, have taken up leadership positions in the country and established dominance in security forces that would be recreated and trained by US officials. In this context, Sunnis have become pejoratively labeled as the former ruling class associated with Saddam's regime and, due to their quantitative limitations and a boycott, have not won the post of prime minister in the country's first parliamentary elections following the invasion, performed in 2005 (KATZMAN; HUMUD, 2016).

It was precisely from this juncture at the time that al-Zarqawi structured a strategy of destabilization of the Shiite regime associated with the US military. The insurgency was mostly promoted by Sunni groups and militias, many of them linked to AQI. Sectarian and anti-occupation violence peaked in 2006 and much of 2007, when technically there was a civil war on Iraqi territory (KAGAN, 2007; PETRAEUS, 2007).

In some parts of the country, in a first moment, a successful alliance of Sunni insurgent groups and tribal leaders against US military forces took place. This meant, in practical terms, that AQI began to establish certain zones of influence and, ultimately, held control of villages, districts and even cities. The most emblematic case was the rule over much of the towns and villages of Anbar province, whose capital, the city of Ramadi, would be controlled by ISIL insurgents in May 2015 and which would resume in December of the same year by the Iraqi government. This mostly Sunni province accounted for 30% of US military casualties between 2003 and 2011, a period of the war against Iraq (IRAQ..., 2015).

Geographically, the insurgency focused on the so-called "Sunni triangle", a vast region of Iraq that comprises Mosul in the North, Rutbah in the West and Baghdad in the East. This is an important territorial area that houses a large part of Iraqi Sunnis, which allowed insurgent groups to establish zones of popular influence and support, as well as important logistical points in an attempt to overthrow the Shiite-dominated government grounded in the American military presence (AL-JABOURI; JENSEN, 2012).

Al-Zarqawi died in a US air strike in early June 2006 in the city of Baqubah, thus not witnessing the fulfillment or otherwise of his goal of establishing the caliphate. Next to the body of the insurgent leader was a sheet with a drawing in the shape of geometric figures and annotations associated with arrows indicating positions (LEWIS, 2014a; ROGGIO, 2014). It was a map that revealed the Jordanian's grand strategy to overthrow the Iraqi regime. Fundamental to understanding the Iraqi civil war, the map came to be known as the "Baghdad Belt" and set out, in al-Zarqawi's view, the plan to establish the caliphate from the Iraqi capital.

More precisely, there were five "belts", or sectors, surrounding Baghdad: 1) the Southern one, comprising the provinces of Babil and Diyala; 2) the Western one, which included the province of Anbar and the area of Thar Thar; 3) the Northern belt, which included the province of Salah-ad-Din; 4) the "Diyala belt" with the cities of Baqubah and Khidis; and 5) the Eastern belt, encompassing rural areas East of Baghdad (LEWIS, 2014; ROGGIO, 2014a). These sectors

<sup>3</sup> It should be noted that the Kurds are essentially characterized by their particularity as an ethnic-linguistic group and not as a religious segment, for example, of Islam. According to a 2014 survey by the *Pew Research Center*, 98% of Iraqi Kurds declared themselves Sunnis and only 2% identified themselves as Shiites. In Iraq, this group concentrates its presence in the so-called autonomous and self-governing Kurdistan Region, one of the most developed in Iraq, but still subordinate in many ways to the Iraqi federal government (MARCUS, 2007). Kurds are also scattered as a minority in several countries in the region, such as Syria, Iran and Turkey.

reveal a strategy of occupation of territory and formation of zones of influence capable of eroding, from the outside, all the administrative and military apparatus concentrated in the capital of the country. All of these areas that comprise the Baghdad belts became the deadliest and most violent during the insurgency (DAMIN, 2016).

From the control of provinces, cities, towns and urban districts, the strategy was precisely to provide logistical bases for the commission of terrorist attacks in Baghdad and thus gradually undermine the legitimacy of the regime anchored in the presence of US military forces. The strategy was therefore clearly based on the need for territorial control prior to the conquest of the country's capital.

Insurgent domination of Anbar, for example, was able to provide control of a large road network that was extremely functional for the movement of foreign insurgents, since this province is bordered by Syria and Jordan. As Kagan (2007) points out, AQI members have established lines of communication between the main cities of Anbar, the insurgency infiltrating Baghdad districts and also Mosul.

Diyala, in turn, was also controlled by Sunni militias formed by former Baath Party members, to the point that al-Zarqawi designated the province as the capital of the Islamic caliphate persecuted by his organization (KAGAN, 2007). As with Anbar, Diyala's geographical position, once controlled by insurgents, made it possible for militants to easily enter the Baghdad metropolitan area and commit terrorist acts against the occupation forces and Shiite communities.

The al-Zarqawi map is therefore extremely important because it points to territory control as a prerequisite for attaining the caliphate. Even though, for a few months, the violence against military and civilians registered in Baghdad was extremely high, AQI was never able to control the capital, and its rule over the belts proved unable to last in time.

In 2007, with the war virtually "lost", the United States promoted an inflection in its conflict strategy. Washington, albeit belatedly, realized that the strategy of the insurgent groups, whether Sunni or even Shiite, focused precisely on acquiring sovereign *status*, imposing fear on civilians, homicides against opposing ethnic groups, and the promotion of alliances with local tribal leaders. These measures would guide the conquest of Baghdad and the overthrow of the Iraqi government with the proclamation of the caliphate under Islamic law.

It was in this need to contain the advance of AQI mainly that the United States began to implement counterinsurgency tactics. Among the measures, in early 2007, President George W. Bush ordered the deployment of 20,000 new military personnel to Iraq. Most of this contingent was distributed between Baghdad and its nearest provinces, not by chance the "belts" demarcated by al-Zarqawi. This increase in the number of military personnel became known as the *Surge*, which achieved its results in reducing violence in the country because it was primarily used for the protection of Iraqi civilians.

This increased presence of US troops in the communities provided assurance that AQI would no longer take control of territories and impose its brutal tactics, which made it possible to build alliances with local Sunni *sheiks* against the rule of insurgent groups in neighboring provinces to the country's capital — this was the origin of the so-called Sunni Awakening. It is not the purpose of this article to detail this new US strategy, but to point out that it worked, and

the insurgent groups were almost completely neutralized in the third half of 2007, as evidenced by the very significant drop in civilian deaths, terrorist attacks and military casualties from both the United States and the Iraqi Security Forces.

What deserves our attention is the fact that, when AQI lost control of the land, being expelled from villages, districts and cities, the group was eventually neutralized by the counterinsurgency strategy led by General David Petraeus. Without any territorial control and with US troops assuming the objective of protecting civilians, insurgent groups were greatly hampered in their efforts to overthrow the regime established in Baghdad characterized by Shiite occupation of key positions within the government.

These groups, therefore, were evacuated from logistics, from resources to finance their activities by levying fees and taxes from local populations, and their main leaders were hunted and killed. After 2007, Iraq allowed itself to live moments of apparent conciliation and a seemingly stable government. Al-Zarqawi's urban strategy, however, would resurface years later after the withdrawal of US combat troops from Iraq in late 2011.

### 3 ISIL and city control

What today the international system knows to be the Islamic State of Iraq and the Levant is the product of a transformation in the Iraqi jihadist scene following the disarticulation of AQI in late 2007.

Jihadism is born after the death of the Prophet Muhammad and was “the fruit of refining the essays of the Quran and the Prophet,” as punctuated by Napoleoni (2015, p. 97, our translation). Jihad has two dimensions, the “major”, which would be the spirituality of each Muslim, and the “minor”, “the material struggle against an enemy”. Also according to Napoleoni (2015, p. 97, our translation), the “minor jihad” is linked to the notion of sovereignty and as instruments “to protect the faithful community”. Within a caliphate, it is up to the supreme leader, the caliph, to recruit faithful people to participate in jihad (NANCE, 2016).

Among civil and military analysts, there is a widespread understanding that ISIL is a kind of successor organization to AQI, sprung from the rubble of al-Zarqawi's group. This was also the official view advocated by the Democratic administration of Barack Obama (EARNEST, 2014). One senior government official even wrote that ISIL “[...] is the true inheritor of Osama bin Laden's legacy” (TSANG, 2014, p. 1).

The resurgence of AQI took place most strongly in 2012, not by chance after the withdrawal of almost the entire US contingent stationed in Iraq. The organization has since made some name changes from AQI to the Islamic State of Iraq, then to the Islamic State of Iraq and the Levant (early 2013) until it finally declared itself an Islamic State (late June 2014).

In addition to the military vacuum brought about by the US withdrawal from Iraq in late 2011, ISIL has once again benefited from the internal political dispute between Shiites and Sunnis. Prime Minister Nouri Kamel al-Maliki's government, elected in 2006 and reelected in 2010, has deliberately excluded Sunnis from the country's government. One of the vice presidents, Tariq al-Hashemi, for example, was removed from office and sentenced, *in absentia*, to death on

the grounds that he was supporting domestic terrorist groups (SULLIVAN, 2013). This vice was Sunni and eventually had to flee to Turkey.

Maliki's government was also extremely authoritarian in its response to Sunni popular demonstrations that erupted in 2013 in the Northern and Western provinces of the country. The Shiite prime minister employed the Iraqi Security Forces to crack down on Sunni protests, producing countless dead and wounded. With this kind of attitude, his government accelerated a process of loss of legitimacy, which opened the way for a further strengthening of Sunni insurgent groups, among which ISIL was the main one.

In regional terms, some events of the so-called Arab Spring in 2013 also influenced the return, now in other ways, of AQI. In addition to not producing stable polyarchic regimes — although it can be said that Tunisia would be a kind of exception, even if precarious —, the spring has destabilized authoritarian governments in important countries, such as Egypt, Libya and Syria, which have been experiencing intense conflict for the sovereignty of the territory.

Of these cases, the Syrian one is especially important to the subject of our article, as factions of the Jabhat al-Nusra organization<sup>4</sup>, considered an affiliate of the Pakistani ruling al-Qaeda core, deserted in order to form, along with Iraqi insurgents, what is now known as the Islamic State of Iraq and the Levant (ZIMMERMAN, 2013). The degeneration of state capacities of the Syrian Alawite house of Bashar al-Assad, the result of which was still an ongoing civil war, led to the creation of a strongly rooted organization in Sunni areas in Syria and Iraq, two border countries. The ultimate goal of the group would be to establish a caliphate from the disintegration of the borders of the Middle East and thus the consequent destruction of the currently established regimes.

In the second half of 2013, with the splitting of Syrian state sovereignty, a strong presence of the so-called Islamic State of Iraq was already diagnosed in northern Syria, in various cities and rural villages. Al-Tamimi (2013), for example, documents, from photos, the presence of the typical extremist flag in various Syrian cities. In many localities, at the same time, manifestations against the presence of elements of the Islamic State of Iraq are narrated, with a certain resistance on the part of the population regarding its methods of action.

For months, Jabhat al-Nusra and the Islamic State of Iraq (ISI) have fought Assad's regular military forces together. This relationship, however, deteriorated over time, according to the facts narrated by Al-Tamimi (2014). In April 2013, the ISI leader al-Baghdadi proposed a merger between his Iraq-based group and al-Nusra limited to Syria. Note that this proposition denoted an attempt to internationalize the operation of the Iraqi Sunni group. It was precisely in this context that al-Baghdadi changed his group's name to the Islamic State of Iraq and the Levant, bringing together al-Nusra leaders and militants.

At al-Nusra, however, this move was not well received. The jihadist group was founded in early 2012 and its top leadership, Abu Mohammed al-Jowlani, did not agree to the union with the Iraqi jihadists, making room for the split between the two organizations (AL-TAMIMI, 2014). In an act of great symbolism, the leader of Al-Nusra renewed his *bay'ah* (oath of allegiance) with the core of Al-Qaeda, led by emir Ayman al-Zawahiri, becoming the only

<sup>4</sup> This group was also known as the Nusra Front or Al-Nusra Front.

organization considered affiliated with Al-Qaeda in Syria. By July 2013, this division between the two groups was already clear.

This process shows that ISIL initially needed to share power with other jihadist groups and only then to control the vast territory that it dominated between 2014 and 2015 in Eastern Syria. The case of the city of Raqqa, considered the capital of the caliphate, is paradigmatic in this regard.

The city was captured by Abu Sa'ad al-Hadrami in March 2013, and by July of that year there was a symbiosis between Al-Nusra and the ISI regarding the administration of the city. With the letter from the Al-Qaeda emir, in the second half of 2013, in which a distinction is established between al-Nusra and the ISI, al-Hadrami and his supporters withdrew from Raqqa and migrated to Tabqa, returning to the city in September, then under the unique denomination of Jabah Al-Nusra (AL-TAMIMI, 2014).

It is considered that only in January 2014 did the ISIL take over Raqqa's sovereignty, after months of intense disputes with other groups for control of the city. Other municipalities and villages in northern Syria and near Aleppo also capitulated to ISIL in the early months of 2014. As Al-Tamimi (2014) writes, establishing ultimate sovereignty over territories would be a basic and distinctive feature of the organization.

[...] despite ISIS's political outreach, the group faces a fundamental problem in dealing with other rebel factions and thus in consolidating political control. This is partly because ISIS already sees itself not merely as a "group" or "faction" like the other rebels but as a "state" that has the prerogative to rule over all others. Therefore, ISIS is inherently unwilling to share power, and often adopts a particularly brutal approach to dealing with other rebel factions. (AL-TAMIMI, 2014, p. 8)

The issue raised here is basic, namely the need for a state to have a certain territory under its control. Land control must be accompanied by the question of internal legitimacy so that a regime can be established. This opportunity for ISIL first arose in Syria. As Napoleoni (2015, p. 84, our translation) emphasized, this "migration to Syria was its last cartridge in the struggle for survival," since "at the end of 2010, the Islamic State of Iraq was on the brink of extinction".

January 2014, in addition to marking ISIL's dominance over Raqqa, also showed territorial gains in Iraq. Fallujah, a major city in the Iraqi Sunni triangle, was also controlled by caliphate fighters. It can be considered as one of the first effective territorial conquests of ISIL in Iraq, which occurred months before the proclamation of the caliphate. Fallujah is a city located in the province of Anbar and 70 kilometers from Baghdad, thus forming part of the capital's belt.

Fallujah's history, following US intervention in 2003, is from a region where Sunni insurgent groups receive support from both the population and tribal leaders. Conflicts between insurgent forces and the US military were intense during the war, as AQI gained significant logistical support in the city to attack Baghdad, in addition to imposing its own rules on local communities. In the so-called second battle of Fallujah, which took place

between November and December 2004, by way of example, 95 military personnel were killed in an attempt to expel the region's extremists (BYERS, 2007). Fallujah was later liberated by the Western occupying forces, but it was one of the first cities to be recaptured by Sunni insurgents, now clustered in ISIL.

It should be noted that, in the early months of 2014, despite the advance of ISIL in Syria and Iraq, the caliphate had not yet been proclaimed. Today, al-Baghdadi's strategy seems clear: to gain territorial control only to later proclaim the caliphate. And the announcement of the establishment of the caliphate was made possible by the organization's offensive in June 2014, particularly in Iraq.

Mosul, the second most populous and mostly Sunni Iraqi city, was captured by extremists on June 10. Its capitulation was followed by other ISIL military victories, with control, among others, of cities such as Ryaad, Hawija, Karma, Rabia, Rawah, Ruthbah and Walled in the same month, as well as Sinjar and Bashiqa in August and Hit and Al Wafa in October 2014. It was, however, the conquest of Mosul that warned the West of what was happening in Iraq, that is, the return of the insurgency after it was supposedly dismantled in the late 2000s (LEWIS, 2014b).

The fall of Mosul revealed the fragility of Iraq's state capabilities, particularly its security forces. The city perished before ISIL without any more substantive resistance, even though Iraqi regiments were present in the region. According to Cockburn (2015), ISIL attempted to capture the city with about 1,300 members, while the Iraqi forces — army, federal and local police — totaled 60,000. This extreme numerical advantage, however, was only theoretical because:

Such was the corruption in the Iraqi security forces that only about one in three of them was actually present in Mosul, the rest paying up to half their salaries to their officers to stay on permanent leave. (COCKBURN, 2015, p. 29)

It is no coincidence that the ISIL assault begins on June 06 and, four days later, an important military victory is proclaimed by the organization. A day before the extremists definitively set the flag of the Islamic State, three Mosul-based generals fled by helicopter to the Kurdistan region, signaling that the city could no longer be recovered by regular Iraqi forces (COCKBURN, 2015).

The achievements of Mosul and Raqqa became the great achievements of the group, decisively influencing so that, by the end of June 2014, the caliphate was finally proclaimed. This is because, according to MCFate (2015), the increasing territorial gains in the first half of 2014, which are consequences of an ongoing process of infiltration into Syria and Iraq, have produced what the author aptly termed the "physical caliphate". It should be noted that it is no coincidence that the organization proclaimed its "state" only after becoming the sovereign of certain inhabited areas in the region.

Control over cities, in this sense, is now being used as a power resource by ISIL, providing it with the basic conditions to legitimize itself among the populations of Iraq and Syria. Focusing on the outskirts of big cities also encouraged Sunni-Shiite sectarianism, the organization's bet to impose its legitimacy and power. There was also a strategy of undermining control of the Iraqi state

in urban centers by capitulating districts and neighborhoods. In the end, government buildings, as the case of Mosul attests, were transformed into bureaucratic spaces of the organization.

The properly military domination of the cities was followed by a bureaucratic effort that sought to institutionalize the power of the organization. ISIL endowed itself with a method of institutionalization in urban areas, for example, by appointing local administrators, establishing governorates, adopting the *Sharia law* and consequently establishing courts, tax collections and the permanent recruitment of new caliphate soldiers. In addition, therefore, to having a monopoly on the use of force, ISIL also imposes itself as the sovereign administrative structure. According to al-Tamimi's (2015a, 2015b) abundant records, in Mosul, the organization created departments to regulate the daily lives of individuals, suppressing any mention of the "Republic of Iraq" and replacing it with the "Islamic State".

ISIL's control of cities also solved, at least in part, the problem of financing its actions. In Mosul, for example, millions of dollars were plundered from the city bank. And taxes and fees were regularly collected in dozens of extremist-dominated cities. In addition, in many cases, the group began to control refineries and oil wells, which fostered the practice of selling oil and fuel in the so-called "black market". In November 2015, for example, hundreds of ISIL tankers were destroyed by the Russian air force in Syria.

City capture also provided insurgents with weapons and ammunition. Citing the case of Mosul again, after its fall, military parades were witnessed in which caliphate soldiers paraded in US-made battle tanks and armored vehicles that were used by the Iraqi Army. In Syria, the advancement of the group in the cities has also enabled ISIS to appropriate weapons from the Assad regime.

Controlling cities also enhanced the propaganda of the ISIL. The organization used its military victories to publicize the existence of a tangible caliphate, initiated in Syria and Iraq, in order to seduce new *jihadists*, including from European countries, to join the ISIL ranks. In July 2014, *Dabiq*, the group's official digital magazine, circulated.

ISIL's dominance pattern in urban centers has greatly hampered its combat by the coalition, which, from August 2014, began launching air strikes against the group. The limitations of action were clear, since directly bombarding urban centers controlled by the organization would mean producing adverse effects such as the death of civilians. The very distinction between combatants and noncombatants, typical of regular conflicts, does not occur in ISIL-controlled cities, since, for example, extremists mingle with noncombatants.

One of the ISIL characteristics is that it has become a predominantly urban organization, disputing sovereignty over certain territories with both the Syrian and Iraqi government. And in the various cities it controlled between 2014 and 2015, the group became a Hobbesian sovereign, imposing its institutions on local people. From this reality derive, in good measure, the difficulties arising for the liberation of these urban territories under the control of the caliphate militants.

The use of airpower showed its clear limits, since negative externalities such as civilian deaths were present during bombings in densely populated areas, such as Mosul. This meant that

the liberation of the cities depended on ground fighting, with ground troops advancing from house to house. It is no coincidence that the Iraqi security forces took almost nine months to declare Mosul free from ISIL. With no troops on the ground and relying solely on air strike capabilities, cities would hardly be able to leave the insurgent group, even if airpower was instrumental in disrupting the group's logistical routes within Syria and Iraq. The bombings alone did not defeat the organization, but weakened its control over territories, cities, districts and rural areas, a control that was completely lost by the end of 2017.

#### 4 Final considerations

As discussed in the previous sections, ISIL used an urban achievement strategy to institutionalize its presence in Syria and especially Iraq to achieve the group's main objective: the formation of a transnational caliphate from the erosion of current borders of Middle Eastern states.

The "physical caliphate", however, has entered a crisis and is now only a wish of the remaining insurgents as a result of ongoing military defeats in 2017. The caliph is in an uncertain place and its "warriors" no longer show any expansionist and offensive impetus in Iraq and Syria. Its most lucrative cities, Mosul and Raqqa, were taken over by official forces in July and October, respectively. In late November, the group lost control of its last city, Rawa, in Iraq.

Finally, on December 7, 2017, Russia declared that Syria was free from ISIL rule and, two days after, Baghdad also announced that Iraqi territory was completely freed from the organization's territorial rule over its cities. ISIL has succumbed to the loss of its territories conquered by force and against the established governments of Iraq and Syria. This does not, of course, mean the demise of the insurgent group, but it is a victory against the establishment of a caliphate based on the perversion of religious interpretation and violence. Since the loss of its territories, ISIL has changed its practices, reverting to sectarian terrorist attacks with improvised explosive devices in Iraqi urban centers.

## References

AL-JABOURI, N. A.; JENSEN, S. The Iraqi and AQI roles in the Sunni Awakening. **Prism**, Washington, DC, v. 2, n. 1, p. 3-18, 2012.

AL-TAMINI, A. J. Al Qaeda Expands into Northern Syria. **Middle East Forum**, Philadelphia, 18 July, 2013. Available at: <https://bit.ly/2ZK03Dg>. Access on: Oct. 15, 2015.

AL-TAMIMI, A. J. The dawn of the Islamic State of Iraq and ash-Sham. **Current Trends in Islamist Ideology**, Washington, DC, v. 16, p. 5-15, 2014.

AL-TAMIMI, A. J. Aspects of Islamic State (IS) Administration in Ninawa Province: Part I. **Aymenn Jawad Al-Tamimi**, [S. l.], 17 Jan. 2015a. Available at: <https://bit.ly/1fhI3sB>. Access on: Oct. 10, 2015.

AL-TAMIMI, A. J. Aspects of Islamic State (IS) Administration in Ninawa Province: Part II. **Aymenn Jawad Al-Tamimi**, [S. l.], 20 Jan. 2015b. Available at: <https://bit.ly/2NpqUUb>. Access on: Oct. 10, 2015.

BYERS, M. **A Lei da Guerra**: direito internacional e conflito armado. Rio de Janeiro: Record, 2007.

COCKBURN, P. **Isis**: el retorno de la yihad. Buenos Aires: Ariel, 2015.

DAMIN, C. J. Violência e baixas militares norte-americanas na Guerra do Iraque (2003-2011). **Revista de Estudos Internacionais**, João Pessoa, v. 7, n. 2, p. 148-170, 2016. Available at: <https://bit.ly/2RwIlQY>. Access on: June 25, 2019.

EARNEST, J. Press Briefing by Press Secretary Josh Earnest. **The White House**, Washington, DC, 11 Sept. 2014. Available at: <https://bit.ly/2J5SX5z>. Access on: April 15, 2015.

FUKUYAMA, F. **As origens da ordem política**: dos tempos pré-humanos até a Revolução Francesa. Rio de Janeiro: Rocco, 2013.

HAMDAN, A. N. Breaker of Barriers? Notes on the geopolitics of the Islamic State in Iraq and Sham. **Geopolitics**, Philadelphia, v. 21, n. 3, p. 605-627, 2016. Available at: <https://bit.ly/2Xu4R2l>. Access on: June 25, 2019.

IRAQ Coalition Casualty Count (2003-2015). **iCasualties.org**, [S. l.], 2015. Available at: <http://icasualties.org/Iraq/index.aspx>. Access on: March 12, 2015.

KAGAN, F. W. **Choosing Victory**: a plan for success in Iraq. Phase I Report. Washington, DC: American Enterprise Institute, 5 Jan. 2007. A Report of the Iraq Planning Group at the American Enterprise Institute. Available at: <https://bit.ly/2XFuddP>. Access on: June 25, 2019.

KATZMAN, K.; HUMUD, C. E. **Iraq**: politics and governance. Washington, DC: Congressional Research Service, 9 Mar. 2016. Available at: <https://bit.ly/2Xs4g1b>. Access on: Oct. 5, 2017.

LEWIS, J. D. **ISIS Battle Plan for Baghdad**. Washington, DC: ISW, 2014a. (Backgrounder June 27, 2014). Available at: <https://bit.ly/2Xdrk0I>. Access on: June 25, 2019.

LEWIS, J. D. The Terrorist Army Marching on Baghdad. **Wall Street Journal**, New York, 12 Jun. 2014b. Available at: <https://on.wsj.com/2ZRIQbn>. Access on: Oct. 10, 2015.

LIEBL, V. The Caliphate. **Middle Eastern Studies**, Abingdon, v. 45, n. 3, p. 373-391, May 2009.

LISTER, C. **Profiling the Islamic State**. Doha: Brookings Doha Center, Nov. 2014. (Brookings Doha Center Analysis Paper, 13). Available at: <https://brook.gs/2nkVmiM>. Access on: Jan. 10, 2015.

MABON, S.; ROYLE, S. **The Origins of ISIS**: the collapse of nations and revolution in the Middle East. London: I. B. Tauris, 2017.

MARCUS, A. Turkey's PKK: rise, fall, rise again? **World Policy Journal**, Durham, NC, v. 24, n. 1, p. 75-84, spring 2007.

MCFATE, J. L. **The ISIS Defense in Iraq and Syria**: countering and adaptive enemy. Washington, DC: ISW, May 2015. (Middle East Security Report, 27). Available at: <https://bit.ly/1Ht7Rey>. Access on: Oct. 10, 2015.

NANCE, M. **Defeating ISIS**: who they are, how they fight, what they believe. New York: Skyhorse Publishing, 2016.

NAPOLEONI, L. **A fênix islamita**: o Estado Islâmico e a reconfiguração do Oriente Médio. Rio de Janeiro: Bertrand Brasil, 2015.

PETRAEUS, D. H. **Congressional Testimony**: report to Congress on the situation in Iraq. Washington, DC: Defense Technical Information Center, 2007. ADA473579. Available at: <https://bit.ly/2NccO8q>. Access on: Jan. 20, 2015.

POLK, W. **Understanding Iraq**. New York: Harper Perennial, 2006.

ROGGIO, B. Analysis: ISIS, allies reviving 'Baghdad belts' battle plan. **Long War Journal**, [S. l.], 14 June 2014. Available at: <https://bit.ly/2J4aWcD>. Access on: June 25, 2019.

SULLIVAN, M. **Maliki's Authoritarian Regime**. Washington, DC: ISW, Apr. 2013. (Middle East Security Report, 10). Available at: <https://bit.ly/2kIvmui>. Access on: May 15, 2018.

TSANG, D. To justify ISIS airstrikes, Obama using legislation he wants repealed. **PunditFact**, Washington, DC, 18 Sept. 2014. Available at: <https://bit.ly/2KFgxcj>. Access on: April 16, 2015.

ZIMMERMAN, K. **The Al Qaeda Network**: a new framework for defining the enemy. Washington, DC: American Enterprise Institute, Sept. 2013. Available at: <https://bit.ly/2ZItmpZ>. Access on: Jan. 6, 2015.

# The employment of Armed Forces in the fight against organized crime: the Mexican case

*El empleo de las Fuerzas Armadas en el combate al crimen organizado: el caso mexicano*

**Abstract:** International security studies have received a considerable impulse from the ideas of the Copenhagen School. One of the School's key concepts is the idea of the "securitization" of a variety of threats to the state and, as a matter of fact, drug trafficking, due to its scope and potential for compromising the state order, is undergoing a process of securitization in various regions of the world. Mexico is one of the countries that has suffered most from the action of organized crime linked to drug trafficking and has deployed its Armed Forces in order to answer to this threat. Thus, this study's general goal is to analyze the Mexican state's use of Armed Forces in the fight against organized crime. Its intermediate objectives are: (a) assessing the Armed Forces' involvement in the fight against organized crime from the perspective of the theme's securitization; (b) analyzing the role of drug trafficking as damaging to the Mexican social and political order; c) studying the historical background of this use of the Armed Forces, in the Mexican case. The study concludes with a discussion on the relevance, to the Mexican case, of the concept of securitization.

**Keywords:** Securitization. Armed Forces. Drug trafficking. Mexico. Copenhagen School.

**Resumen:** Los Estudios de Seguridad Internacional recibieron un gran impulso con las ideas que surgieron en el ámbito de la Escuela de Copenhague. Se subraya, en ese sentido, el desarrollo del concepto de "titulización" de los más distintos temas que se constituyan en una amenaza al Estado. En ese sentido, la cuestión del narcotráfico, debido a su alcance y potencial de comprometimiento de la orden estatal, pasa por un proceso de titulización en diversas regiones del mundo. México es uno de los países que más sufre con la acción del crimen organizado que está conectado al narcotráfico y encontró en el empleo de sus Fuerzas Armadas una respuesta a esa amenaza. De esa manera, el presente estudio tiene el objetivo general de analizar el empleo de las Fuerzas Armadas Mexicanas en el combate al crimen organizado. Además de eso, presenta los objetivos intermedios de (a) analizar el proceso de involucramiento de las Fuerzas Armadas en el combate al crimen organizado bajo la óptica de la titulización del tema, (b) analizar el papel del tráfico de estupefacientes como comprometedor del ordenamiento social y político mexicano y (c) estudiar los antecedentes históricos de ese empleo en el caso mexicano. Por fin, el estudio concluye sobre la pertinencia de los conceptos de titulización en el caso mexicano.

**Palabras-clave:** Titulización. Fuerzas Armadas. Narcotráfico. México. Escuela de Copenhague.

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## 1 Introduction

Closely linked to international drug trafficking, organized crime in Mexico is a complex problem, with profound impacts on the country's political, economic, psychosocial, and health structures. Generally speaking, Mexico's situation is not different from that of other Latin American states. However, the Mexican case has special characteristics, due to its position as a "neighbor" to the world's largest illicit drug market, the United States of America.

The vastness of the US–Mexico land border serves as an incentive for drug-related activities, be it drug production or the use of Mexican territory as a transit area for drugs produced in other regions. This reality has favored the formation of a complex organized crime network, which compromises the Mexican state power and exponentially raises the country's crime rates. Another consequence is that Mexico is directly influenced by US anti-drug policies.

Positioned in a reasonably stable region, with no imminent external threats to its sovereignty, it was not long before the Mexican state began viewing its Armed Forces as an essential tool in the combat against organized crime. This happened precisely when police structures failed to respond as they were expected to. Much more than a political decision in sync with the Latin American tradition of using the military to deal with domestic affairs, this fact should be placed within a much broader framework, defined by the increasing securitization of issues previously outside the scope of national defense structures, as explained by the authors of the Copenhagen School. Gradually, the internal deployment of military forces ceased to be exceptional and merely supportive of the action of other agencies, becoming the Mexican state's principal instrument in the fight against organized crime.

Thus, this article seeks to answer the following research problem: how did the process of involvement of the Mexican Armed Forces (AFs)—and particularly the Army—in the fight against organized crime develop? To solve this problem, our general research objective was an analysis of the engagement of the Mexican AFs in the fight against organized crime.

As necessary steps for the correct understanding of this phenomenon, the following intermediate objectives were established: to analyze the AFs' involvement in the fight against organized crime from the perspective of the theme's securitization; to analyze the role of drug trafficking as a danger to the Mexican social and political order; to study the historical antecedents of this use of the AFs, in Mexico's case.

Such analysis is considered timely, and also necessary to foster interest in this theme within the Brazilian academic environment. In fact, research on the topic gains relevance as the parallels between Mexico and Brazil—where we are witnesses to an increasing use of the military in the fight against organized crime—become more and more evident. The study of the Mexican case may contain useful information to be used in researches aimed at substantiating the formulation of Brazilian public policies to address the issue of drug trafficking and the use of the AFs against it, provided that the differences between the Mexican and the Brazilian contexts are duly observed.

Thus, this paper's initial section is devoted to discussing the securitization of the fight against drug trafficking, analyzed in light of the Copenhagen School's ideas. The following two sections are dedicated to the analysis of this securitization process in the concrete case of

Mexico, providing a brief historical summary based on the analysis of official documentation published by the Mexican government and a revision of the bibliography on the phenomenon. The division of our analysis into two sections is based on the timeframe of Felipe Calderón's coming to power. The rationale for this choice is that, according to the authors, the beginning of Calderón's government was the apex of the securitization of drug trafficking in Mexico. Finally, the last section presents the study's conclusions, seeking to confront the Mexican process and the ideas of the Copenhagen School.

## 2 Securitization of the fight against drug trafficking

Early studies on what became known as the Copenhagen School<sup>1</sup> date back to the 1980s. These studies emerged as a critique of the realist model, typical of the Cold War period. The Copenhagen School sought to propose a third way situated between the alternatives of realist militarism and human security studies (MARTINEZ; LYRA, 2015). Its research focuses on the need for security studies to broaden their scope beyond military aspects, also incorporating threats originating from the political, economic, environmental and social areas (TANNO, 2003). Such a broadening of the subject of security came as a response to Europe's own security issues.

The development of the Copenhagen School's line of thought is deeply linked to the evolution of the concept of "security," which, in the words of Buzan, Waever and Wilde (1998, p. 23), has acquired the following definition:

"Security" is the move that takes politics beyond the established rules of the game and frames the issue either as a special kind of politics or as above politics. Securitization can thus be seen as a more extreme version of politicization.

Buzan states that security studies should investigate threats from various sectors, while keeping the state as the main analytical unit. This statement is associated with the school's initial phase of development, still linked to some realist paradigms (TANNO, 2003). Despite receiving criticism from his own Copenhagen School peers, Buzan retained the centrality of state in security issues, a clear link to realist logic.

Within Copenhagen School's prevailing mode of thought, any issue arising from the public domain can be answered in a "nonpoliticized," "politicized" or "securitized" way. In short, a nonpoliticized public issue is one that "the state does not deal with and is not in any other way made an issue of public debate and decision" (BUZAN, WAEVER, WILDE, 1998, p. 23) Politicized issues, on the other hand, involve the elaboration of public policies that require decision-making on the part of the state, together with proper allocation of resources. Securitized issues are those the state answers to by the adoption of emergency measures, justified by the allegation of existential threats, and solved with actions outside the normal bounds of political procedures (BUZAN; WAEVER; WILDE, 1998).

A problem is securitized when its relevance is considered sufficient to promote significant political effects. According to Buzan, Waever and Wilde (1998, p. 23), securitization

<sup>1</sup> The name is a reference to the *Copenhagen Peace Research Institute*.

is the result of a “speech act.” This act is not interesting as a sign referring to something real, since “it is the utterance [of the problem] itself that is the act.” A “successful securitization thus has three components (or steps); existential threats, emergency action, and effects on interunit relations by breaking free of rules” (1998, p. 26). However, this process does not depend solely on the action of its agents. For it to occur, a problem must be recognized socially as a security threat. This allows for the intersubjective sharing of meanings among those responsible for formulating and implementing an agenda (TANNO, 2003).

Thus, the securitization process is based on the formulation of a discourse centered on the necessity of facing a serious threat, a supreme emergency. On that basis, this discourse is shared among different actors. To counter the new threat, extraordinary measures are presented. These may contradict previously defined rules, or establish new limits for the applicability of state instruments. This conceptual framework serves as a basis for analyzing the securitization of drug trafficking.

Historically speaking, the “War on Drugs” can be placed at the end of the Cold War, with the restructuring of regional order in Latin America. Crossing borders, this phenomenon encompasses non-state and transnational actors, threatening governments and the region’s equilibrium. In this sense, it constitutes an internal and external danger to countries (LAMMERHIRT; REMONDEAU, 2015).

As part of the world’s periphery, Latin American countries are the most affected by drug trafficking. The conflicts imposed by this issue on international political relations confer it with a significance that rivals that of the twentieth century’s ideological conflicts. The complexity of the drug trafficking problem has an even greater repercussion in times of globalization (SANTANA, 1999). Discussing the role played by Latin America in the international drug market, Santana (1999, p. 101, our translation) states that:

In the later years of the twentieth century, Latin America and other peripheral regions feature prominently in the international division of crops and products linked to illicit drug trafficking. These countries are major drug suppliers to developed-nation markets.

Thus, Latin America has become an illicit drugs supplier not only to the US market, but also to Europe. Drug cultivation, production and trafficking have reached a scale that has allowed the formation of powerful international criminal organizations (SANTANA, 1999). Mexico, with its proximity to the US, has become one of the preferred locations for the growth of organized crime linked to drug trafficking. This was accentuated by the dismantling of the large Colombian cartels (MENDOZA CORTÉS, 2016).

Meanwhile, the end of the Cold War brought doubts regarding the new roles of the military in peripheral countries. The end of the struggle against Communism and the defense of the “Western world” raised questions concerning the military forces’ attributions in the new order (SANTOS, 2004). In countries with fragile state structures, it was not long before the armed forces started being perceived as an immediate response to new threats. This process can be observed in several Latin American countries, such as Colombia, Brazil, and of course Mexico.

### 3 Antecedents of the fight against drug trafficking in Mexico

To analyze the antecedents of the use of the Mexican AFs to combat drug trafficking, we reviewed several *informes de gobierno*<sup>2</sup>. This allowed us to study the Mexican state's official discourse on the matter, as purported by its head of state. It is noteworthy that the Mexican Constitution (MÉXICO, 1917) predicts the AFs' use for purposes of 'internal security' and 'external defense'<sup>3</sup>. However, it provides no in-depth definition of these concepts. According to Mendoza Cortés (2016), the civil-military pact—which put an end to the post-Mexican Revolution rebellions and consolidated the subordination of the barracks to the civil government—and the principle of nonintervention in external conflicts dispelled any urgency from the debate about the domestic functions of the Mexican Armed Forces. However, the absence of this debate did not prevent the military from gradually becoming involved in the fight against drug trafficking.

According to Valencia (1992) and Castro (2017), from 1948 to 1970 the focus of state action was combating poppy and marijuana plantations. This offensive was led by the Attorney General's Office (PGR), with the participation of the Army merely as an auxiliary element. Thus, this period sees the beginning of the Mexican AFs' use in the fight against drugs. Such a model—in which the PGR is the main actor, and the AFs act as a supporting element—will be a constant throughout the second half of the twentieth century, despite variations in the degree of military involvement.

Until 1955, the government reports contain repeated mentions of the use of the military forces only in support of the PGR. In 1955, President Adolfo Ruiz Cortines (1953–1958<sup>4</sup>) highlights the efficiency of the PGR's work against illicit drug trafficking, treating the campaign as permanent. He praises the Army for its work on agricultural pests, the opening of vicinal paths, and other actions. This of course is a reiteration of his support for the repressive action carried out by the PGR, the main actor in the combat against drug trafficking.

According to Carvente Contreras (2014), activities related to drug trafficking in Mexico increased from the 1960s, which in turn led to an increase in PGR interventions. In 1966, the Canadór Plan was implemented<sup>5</sup>. It had the participation of the *Secretaría de la Defensa Nacional* (National Defense Secretariat), joined by the Army and the Attorney General's Office (RODRÍGUEZ BUCIO, 2016). Throughout the campaign, each operation employed a 2500

2 "Informe de Gobierno" (government report) is an accountability exercise by the President of the Republic to the Honorable Congress of the Union. It reports on the effort made by the Federal Public Administration to make Mexico a Society of Rights, beginning a new and more fruitful stage in the country's development. It is held annually, and determined by Articles 69 of the Mexican Political Constitution and 6 of the Planning Act (MÉXICO, 2015).

3 Article 89. The powers and obligations of the President are the following: IV. To preserve national security, in the terms of the respective law, and to dispose of the entire permanent Armed Forces, that is, the Army, the Navy and the Air Force for the internal security and external defense of the Federation.

4 Authors' notes: It is worth pointing out that each new government usually assumes power on December 1st. For readability's sake, however, this paper will disregard the first month of each government. Strictly speaking, the correct range of dates would be December 1, 1970 to December 1, 1976. That period, for instance, will be notated as "1971 to 1976."

5 The Mexican government's Canadór Plan predicted that the Attorney General's Office (PGR) would coordinate the employment of public security agents, together with members of the Armed Forces, in the combat against the planting of marijuana and poppy. It was established in 1966, during the administration of President Gustavo Díaz Ordaz. The plan remained operational for the next two decades; only the name of each operation, or "Task Force," was changed (VALENCIA, 1992).

to 3000-strong force (CARVENTE CONTRERAS, 2014). Since then, the participation of the Mexican Army in interventions against drug trafficking has become recurrent in Mexico (CASTILLO GARCÍA, 2010; VALENCIA, 1992).

During President José López Portillo's administration (1977–1982), the Condor Task Force,<sup>6</sup> also known as Operation Condor, was implemented (CARVENTE CONTRERAS, 2014; CASTILLO GARCÍA, 2010), lasting 10 years. In this mission, each intervention had a force of 2,500 Mexican Army personnel, 250 federal police officers, members of the Navy, members of the state police, and members of the municipal police. Condor was a milestone in the diversification of institutions involved in the combat against drug trafficking.

From 1977 to 1978, these actions led Mexico to lose its post as the main producer of marijuana and poppy, especially in the Durango, Chihuahua and Sinaloa areas. As a side effect, there was an exponential increase in settler migration to the country's urban centers, with serious social consequences, such as increased poverty and violence in the cities of Sinaloa and Durango (CARVENTE CONTRERAS, 2014). Moreover, drug trafficking activities also went through a process of relocation. The most emblematic example is the change in drug trafficker Félix Gallardo's operational territory. His activities were transferred to Guadalajara, where he developed his criminal activities in the early 1980s. This led to a more robust cocaine trafficking dynamic, now targeting the US (CASTRO, 2017).

In addition to the destruction of plantations, during this period the AFs began to carry out interception actions, such as: 1) aircraft interception; 2) interception of illicit domestic shipments; and 3) activities in the country's ports, in order to intervene in sea routes. This range of activities led the Army to expand its operations throughout the national territory (CASTILLO GARCÍA, 2010). In addition, Contreras Velasco (2010) points out that the increased state repression led to another side effect, known as "Cartelization."<sup>7</sup> Many small producers ceased to engage with narcotics due to the increased risk; this indirectly benefited the more belligerent producers who were able to organize and confront the security forces. In the mid-1980s, new cultivation techniques in hard-to-reach regions—together with corruption in various government sectors, as well as economic fragility—led to a larger marijuana acreage than before the beginning of Operation Condor, launched in 1977 (CONTRERAS VELASCO, 2010).

<sup>6</sup> The Condor *Task Force* is often confused with the homonymous operation; 'Task Force' referred only to the employed personnel. *Operation Condor* regards the tactical actions executed by the Task Force. It was restricted to the mountainous zone of the states of *Chihuahua, Sinaloa and Durango*. It was divided into two phases. During the first, the eradication of opium was prioritized. The second phase included the destruction of clandestine plantations and runways and the dismantling of illicit laboratories. According to the US Central Intelligence Agency (CIA), the operation had difficulties concerning ground access and air support, as well as limited intelligence and communication skills (MENDOZA CORTÉS, 2016).

<sup>7</sup> A phenomenon in which greater government rigidity against a particular illicit practice, in this case the planting of prohibited products (marijuana and poppy), causes small "farmers" to give up the activity for fear of being arrested. The "businessmen" who, despite the risk, maintain the activity, do so because they believe they have enough strength to fight government repression. They become stronger because they occupy the void left by the "small farmers," increasing their profits. Thus, their criminal organizations grow, generating the cartels (TORO, 1995 apud CONTRERAS VELASCO, 2010).

President Miguel de la Madrid's mandate (1983–1988) is marked by a more forceful speech against illicit drugs. The 1984 government report (MÉXICO, 1984) cites drug trafficking and drug addiction as one of the world's most critical problems. However, 1985 witnesses an international incident that had a significant influence on Mexico's anti-drug policy. An American agent, Enrique Camarena, is captured and killed by the Guadalajara Cartel, led by Rafael Caro Quintero. This generated international pressure for Mexico to increase its crack down on cartels (QUESADA, 2013). This pressure is clearly reflected on the subsequent reports by the Mexican President. In 1985 (MÉXICO, 1985), he determines that the fight against drug trafficking is to become energetic and effective. For the first time, the importance of facing corruption in the fight against organized crime is mentioned. This incident brought political consequences that led the Mexican government to perceive drug trafficking as a threat to national security, in alignment with Ronald Reagan's *National Security Decision Directive 221* (MENDOZA CORTÉS, 2016).

The 1986 report mentions the increase in operations throughout the national territory (as compared to the beginning of the government). According to Madrid (MÉXICO, 1986), at first the Army and the Air Force only carried out one national operation per year (Operation Condor), together with the application of the Canador Plan. In 1986, however, there were 18 operations across the country. The report also complains about international pressure, which deemed the government's actions insufficient.

In 1987, the government report refers to the Army more often, with suggestions to the effect that it has been modernized and would now be able to deploy in any part of the country, increasing its participation in the fight against drug trafficking. Here, the issue of cocaine trafficking appears for the first time in a government report, with Mexico recognizing its position as a transit country for the product. Moreover, the report stresses that drug trafficking is an international offense and, also unprecedented, cites the problem of growing domestic demand (MÉXICO, 1987).

In the 1988 report, in addition to the usual praise of the Army and the PGR for their commitment, there is a note on how the Army has been forced to make adjustments to its organization and procedures, as a demonstration of the AFs' efforts to respond to the challenge posed by the cartels. Furthermore, regarding the international arena, the report marks the transition from a defensive stance into an offensive one, noting that Mexican actions and efforts in the fight against drugs were not being reciprocated by similar organisms in other countries (MÉXICO, 1988).

From 1989 to 1994, the Mexican government was led by President Carlos Salinas de Gortari. Gortari's government reports (MÉXICO, 2006a), like those of his predecessor, are quite rich in information, aiming to demonstrate that Mexico had continued its fight against drug trafficking, and pointing to the increasing importance of military deployment in this fight. In his first report, Gortari mentions that Mexico's daily deployment involved a military force of 14,000. Among other considerations, the president praises the work of the Mexican AFs, while also carrying out important reflections on the phenomenon. These reflections have contributed to the broadening and intensification of research on the subject in Mexico. According to López-González (2008), this period witnesses the militarization of the PGR, with military personnel being assigned to the organism's main leadership positions.

The PGR remained an instrumental agency for the fight against drugs, but its senior staff was subjected to a growing process of militarization.

The 1990 government report presents a continuation of the ideas of the previous report. An attempt is made to analyze the phenomenon from a broader point of view, stimulating the participation of all Mexican society in the debate. In this sense, there is a perception that the security and defense forces alone could not solve the problem: all of society had to be involved. For the first time, national unity was proposed as necessary in the fight against the narco threat.

In the 1993 and 1994 government reports there is another interesting development: a call for international society to help solve the Mexican problem—given the international character it had assumed—without undermining its territorial sovereignty. The government also points out that, despite the arrest of many drug traffickers, the problem has persisted in Mexico—which is explained by the large profit provided by this type of crime.

From 1996, the Mexican government seeks to strengthen inter-institutional relations, with a restructuring of the *Secretaría de la Defensa Nacional*<sup>8</sup> (SEDENA) to combat drug trafficking (CARVENTE CONTRERAS, 2014). Between 1995 and 1998, an average of 22,000 military personnel per operation are deployed.

Ernesto Zedillo's (1995 to 2000) government reports have a more general character, as they avoid delving into the issue of drug trafficking. However, the increasing violence of the cartels led the president to pronounce that drug trafficking was society's main enemy and the most serious threat to national security, health and public tranquility. Zedillo also highlights the responsibility of other countries to combat drug trafficking and mentions that drug trafficking is corrupting society, citing the punctual irregularities committed by Army personnel, which, he states, had been properly addressed (MÉXICO, 2006b).

In 1998, the Mexican government creates eleven Regional Coordination Groups<sup>9</sup> and thirty-one Local Coordination Groups. Composed of elements from various government agencies, these groups carried out the *sellamiento* operations (interceptions and closing of passages) in the northern and southern borders of the country. They also operated in Baja California, the Sea of Cortés, the Yucatán Peninsula, the Pacific coastlines, the Gulf of Mexico, and the Isthmus of Tehuantepec. During this period, the PGR remained the highest authority in the fight against drugs (MENDOZA CORTÉS, 2016).

From 2001, military operations to combat drug trafficking continued to focus on the eradication and prevention of production; on land, sea and air interception; on demand prevention and control; on inter-institutional cooperation, and on international cooperation. In the same year, the average Army force dedicated to these operations increased from 22 thousand to 30 thousand men (CARVENTE CONTRERAS, 2014; MENDOZA CORTÉS, 2016).

<sup>8</sup> The *Secretaría de la Defensa Nacional*, or SEDENA, is the counterpart to the Brazilian Ministry of Defense (in the Brazilian government structure). However, only the Mexican Army and Air Force are under the SEDENA, with the Navy linked to another secretariat.

<sup>9</sup> The Coordination Groups, both Regional and Local, had as their main objective to bring together under one environment all sectors of public power with responsibilities in the fight against drug trafficking, centralizing the planning of local and regional operations (MENDOZA CORTÉS, 2016).

However, despite the efforts of the Mexican state, the cartels increased their power and influence. This is evidenced by the very increase in military personnel involved in anti-drug operations. With the problem reaching an unprecedented dimension, President Felipe Calderón recognized it as Mexico's main challenge, in a statement shortly after taking office in December 2006 (CASTRO, 2017).

#### **4 As forças armadas mexicanas no combate ao narcotráfico no século XXI**

Mendoza Cortés (2016) provides an overview of the growing external pressure regarding the issue of drug trafficking in Mexico. With the start of the US-led "War on Terror," criminal organizations like the Mexican "Zetas" came to be seen as potential threats to US national security, due to the possibility of their employment by terrorist groups such as *Al Qaeda*. Meanwhile, Astorga and Shirk (2010) point to an increase in drug-related violence, with 20,000 murders attributed to criminal organizations in the 2001 to 2009 period.

Felipe Calderón's presidency, a milestone for the engagement of the Mexican AFs in the fight against drug trafficking, takes place in this context. At the behest of the president, the *Directiva para el combate integral al narcotráfico 2007–2012* (Directive for a comprehensive fight against drug trafficking, 2007–2012) is drafted. This directive served as a guideline for SEDENA's and the Mexican Army's actions during the following years. Therefore, as early as 2007, according to the *Primer Informe de Labores*<sup>10</sup> (MÉXICO, 2007), there is an exponential increase in the forces mobilized by the Mexican Army, reaching 45,000 military personnel per month. This contingent was aimed at undermining the economic base of traffickers, inhibiting the use of the national territory for illicit practices and assisting other authorities in dismantling organized crime.

According to Mendoza Cortés (2016), the lack of a comprehensive anti-drug policy and an incorruptible civilian structure to address the problem had led to increased military involvement, culminating in the latter being delegated the exclusive responsibility for eradicating trafficking, made effective in 2006 by Calderón. The approval of the military in the eyes of public opinion, in contrast to the negative image of the police forces, contributed greatly to this decision (ASTORGA; SHIRK, 2010). This can be seen as the moment in which the AFs, and particularly the Army, assumed the leading role in the fight against drug trafficking in Mexico.

Another relevant feature of this period is SEDENA's implementation of *descentralización del mando* (Decentralization of command). This consisted in giving more autonomy to each military authority in its area of operations. Individual military authorities were thus able to perform activities outside of central control, avoiding the duplication of efforts and allowing each to act according to the characteristics and demands of a particular area (MÉXICO, 2007). In order to undermine the traffickers' economic base, the Army continued to be employed for the destruction of plantations (marijuana and poppy) in various joint operations, such as Michoacán I and II, Sierra Madre I and II, Nuevo León - Tamaulipas, Tijuana, Guerrero, Caribe 07, as well as several permanent joint operations alongside the Air Force, such as Jalisco and Oaxaca (MÉXICO, 2007).

<sup>10</sup> The *Informes de Labores* are predicted in the articles 93 of the Political Constitution of the United States of Mexico and 23 of the Organic Law of the Federal Public Administration. The SEDENA leadership presents the Union Congress with a report of the actions carried out during the last year, usually on the first of September. The *Informes* seek accountability and transparency as key components for trust in institutions (MÉXICO, 2013a, our translation).

In order to inhibit the use of the national territory for illicit activities, according to the *Primer Informe de Labores* (MÉXICO, 2007) the Army began to be employed at fixed and mobile roadblocks: surveilling areas linked to drug trafficking. To this end, mixed-operation bases were established in the states of Sinaloa, Michoacán, Veracruz, Campeche, Oaxaca, and Chiapas. These bases were placed in areas with more recurrent criminality.

The following years witness a continued tendency of Armed Forces leadership in the fight against drug trafficking. According the *Informes de Labores*, SEDENA acquired new equipment, such as molecular detectors, radars and aerial spraying equipment. During this period, the US provided significant financial aid to the Mexican government, in the *Iniciativa Mérida* (Mérida Initiative). Thus, between 2008 and 2015, around 1.5 billion dollars were donated. The money was used mainly to purchase equipment and train troops for the Mexican AFs and the police (ROSEN; ZEPEDA, 2016). This demonstrates the US government's deep fear that the violence practiced by Mexican groups would overflow into its territory.

Enrique Peña Nieto (2013–2018) vowed to preserve this scenario of massive AF employment (CASTAÑEDA, 2013), as can be seen in the SEDENA's *Informes de Labores* released during his mandate. From the *Primer Informe* (MÉXICO, 2013a) one can infer that the country is deeply immersed in an environment of ravenous violence. The report points to factional fighting as the main cause of this situation, mentioning its effects, such as kidnappings, extortion, executions, and attacks against the authorities.

Another milestone is the implementation of the “Mexico in Peace” National Goal, a part of the *Plan Nacional de Desarrollo 2013–2018* (National Development Plan, 2013–2018) (MÉXICO, 2013b). It was comprised of the following activities: 1) Eradication of stimulant-drug crops; 2) Interception of shipments; 3) Establishment of an Integral Air Surveillance System; and 4) Operations to reduce violence.

The eradication of stimulants was conducted in the same way as in the previous period, using helicopters for aerial spraying of plantations and manual destruction by army troops. In 2013 alone, eleven operations of the kind were performed. The novelty here was the increasing use of technology, such as the SEDENA Geospatial Management System, which facilitated the location of illicit crops.

Interceptions were also done using the previously existing methods, such as blockades on major highways, sniffer dogs and advanced technology. The *Primer Informe* (MÉXICO, 2013a) reports the optimization of blockades, with the reduction of fixed posts and the increasing in mobile posts. This changed the dynamics of anti-drug trafficking actions at the local level.

An important adaptation made by the Mexican Army during this period was the creation of the Military Police Brigades. Eight new brigades were established throughout the national territory. At first, its members practiced common specialties, gradually adapting towards the registration of their new qualification as anti-narco brigadiers. This marked the formation of the first specialized members of the new military brigades. The point was for these military personnel to be employed in counter-narcotics activities, freeing the rest of the army for other actions, related to their primary purpose of homeland defense (ELLIS, 2018).

In any case, this period sees the consolidation of a discourse favorable to the use of the Mexican AFs to combat drug trafficking. Even the available organizational structures and material resources went through adaptations, promoting the displacement of most Mexican military personnel to actions related to internal security, not external defense. More than maintaining a policy of involving military personnel in the crackdown on drug trafficking, the Calderón government turned the Mexican AFs, and especially the Army, into the real driving forces of the “War on Drugs,” instituted during his mandate. The Calderón government was also responsible for creating the legal framework to support these military actions, with the publication of the new *Ley de Seguridad Interior* (Law of Internal Security) (MÉXICO, 2017). The law established hitherto non-existent parameters for the employment of federal troops, and also conceptualized the notion of Homeland Security<sup>11</sup>.

## 5 Conclusion

This article attempted to present the process by which the Mexican AFs transitioned to an active leadership in the fight against drug trafficking, from their previously secondary role. It also sought to analyze the securitization of societal issues based on the concepts proposed by the authors of the Copenhagen School. This section attempts to confront the actual Mexican process and the conceptual premise of securitization, as applied to the Mexican fight against drug trafficking.

First, it is important to highlight that there are key points where the Mexican case deviates from the model proposed by Buzan, Waever and Wilde (1998). One only needs to realize that the employment of the AFs against the production and cultivation of drugs is not a recent phenomenon in Mexico: it has a long history, dating back to the post-World War II period. Thus, it would be incorrect to assume that Calderón’s solution of formalizing the AFs’ role as the main actor in the fight against drugs was entirely unprecedented.

It is important to highlight that the AFs’ commitment to domestic affairs is a characteristic of the formation and development of Latin American states. Throughout history, Latin American armies have been, on numerous occasions, committed to concepts such as Homeland Security, the Guarantee of Law and Order, the preservation of public order, and the preservation of territorial integrity, among others. Thus, historically and regionally speaking, the Mexican Army’s current commitment to fighting drugs is nothing new.

However, such deviations are not extraneous to the securitization scenarios proposed by the Copenhagen School. The securitization model predicts that existential threats to national security may vary in regards to their themes, and also in time and space. A topic such as drug trafficking can be viewed as a security threat in one country but not in another. It may also be

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11 Article 2. Internal Security is the condition provided by the Mexican State that enables to safeguard the permanence and continuity of its government and institutions orders, as well as national development, by maintaining the constitutional order, the Rule of Law and the democratic governance in the whole national territory. It includes the set of organs, procedures and actions destined for those purposes, respecting human rights throughout the national territory, as well as to provide assistance and protection to federal entities and municipalities, against risks and threats that compromise or affect national security in the terms of this Law (MÉXICO, 2017, our translation).

part of a country's security agenda at any given time, and then leave it at another time. The theme may be securitized on one occasion and return to the political sphere on another. That is, the same theme can undergo processes of securitization and desecuritization, according to space and time (BUZAN; WAEVER; WILDE, 1998). In this sense, two moments of increased military engagement in the Mexican war on drugs can be identified: the 1980s (Miguel de la Madrid government) and especially the first decade of the 21st century (Felipe Calderón government). During both, external pressures, particularly from the US government, played a decisive role in the choice of increasing the AFs' involvement.

Thus, although the militarization of the drug war in Mexico is a decade-old phenomenon, it was considerably accelerated by the Calderón administration (ASTORGA; SHIRK, 2010), during which the Army effectively took point. In analyzing this perspective, it is clear that the theme of organized crime linked to drug trafficking is used recurrently by official discourse throughout the second half of the twentieth century, and constantly regarded as a "threat" to the Mexican state. The increasing involvement of the military forces in the fight against drug trafficking was based on this discourse. Such a repeated "speech act" reaches new heights in Felipe Calderón's term, when the engagement of the AFs is again openly and willingly presented as a solution to the compromise of public security in the country. This takes place during a time of increasing external pressure. Mendoza Cortés (2016) states that this process reflects the evolution of the drug issue from a public health problem to a national security one. However, in addition to securitizing the issue, the Calderón government turned the military forces into the leading forces in the repression against the narco threat, also promoting the adaptation of military organizational structures, together with changes in doctrine and equipment. In the words of Mendoza Cortés (2016, p. 46, our translation):

The unilateral declaration of the "War on Drugs" by President Calderón ... without prior diagnosis and no heed to legislative protocols, in the midst of a legitimacy crisis ... conferred Mexico's internal security with a belligerent connotation, under the triad criminalization/violence/militarization.

Although the recurrent use of the AFs in subsidiary activities and domestic affairs is commonplace in the historical process of Latin American countries, the Mexican case is hyperbolic. Even if the military had been present in the fight against drug trafficking since the second half of the twentieth century, their protagonism was punctual, occurring in response to the rise in crime rates or to internal and external political pressures, especially since the 1990s. The Calderón government was the apex of this process.

In addition, consideration must be given to the US role in the elaboration of Mexico's drug policy. López-González (2008) highlights the important contribution of international pressures to the increase of military engagement in the fight against drugs. According to the author, the Mexican government has historically been constrained by the different US approaches to drug control. Thus, the US was an important actor in the process of securitizing drug trafficking. This

becomes particularly evident when analyzing the impact of George W. Bush's drug policy on the ordering of high-impact anti-drug actions by President Calderón.

Finally, it is worth asking whether this phenomenon is a confirmation of the notion that, in peripheral countries, military forces *must* take on secondary missions, such as border security and anti-drug trafficking operations. Thus, it would not be outside the realm of possibility to see this process as the confirmation of Jacques Perruchon de Brochard's Block Theory, in which external security becomes an attribution of the bloc's leading nation (in this case the US).

## References

ASTORGA, L.; SHIRK, D. A. **Drug Trafficking Organizations and the Counter-Drug Strategies in the U.S.-Mexican Context**. San Diego: Center for U.S.-Mexican Studies, 2010.

BUZAN, B.; WAEVER, O.; WILDE, J. **Security**: a new framework for analysis. Boulder: Lynne Rienner Publishers, 1998.

CARVENTE CONTRERAS, V. H. **Reestructuraciones de órganos y funciones de combate al tráfico de drogas**. Procuraduría General de la República (1952-2012). Cuajimalpa de Morelos: Instituto Nacional de Administración Pública, A.C, 2014.

CASTAÑEDA, J. G. **Amanhã para sempre**: o México contemporâneo e seus desafios. Translation by Luiz A. de Araújo. São Paulo: Companhia das Letras, 2013.

CASTILLO GARCÍA, G. Luchan contra el *narco* 94 mil 540 militares; em 1950 lo hacían 3 mil. **La Jornada**, Santa Cruz Atoyac, 28 marzo 2010. Available at: <https://bit.ly/2KJVI5l>. Access on: July 22, 2018.

CASTRO, J. M. C. **Orígenes y evolución del narcotráfico en México y la participación del ejército y fuerza aérea mexicanos en el combate al crimen organizado**. 2017. 65 f. Trabalho de Conclusão de Curso (Especialização em Política, Estratégia e Alta Administração Militar) – Escola de Comando e Estado-Maior do Exército, Rio de Janeiro, 2017.

CONTRERAS VELASCO, O. **La evolución del Narcotráfico en México**. Austin: Lanic, 2010. Available at: <https://bit.ly/1PhRNSl>. Access on: Aug. 13, 2018.

ELLIS, R. E. Mexico's fight against transnational organized crime. **Military Review Online Exclusive**, Fort Leavenworth, Jul./Aug. 2018. Available at: <https://bit.ly/2XEOZu4>. Access on: Nov. 23, 2018.

LAMMERHIRT, L.; REMONDEAU, C. Securitização da questão colombiana: contribuições pós-positivistas para os estudos de segurança internacional no Pós-Guerra Fria. **Cadernos de Relações Internacionais**, Rio de Janeiro, v. 8, n. 1, p. 56-69, 2015.

LÓPEZ-GONZÁLEZ, J. A. **The Politics of Civil-Military Relations in Mexico**: a historical and institutional approach. 2008. Thesis (Doctor of Philosophy) – The London School of Economics and Political Science, London, 2008.

MARTINEZ, E. D. M.; LYRA, M. P. O. O processo de dessecuritização do narcotráfico na Unasul. **Contexto Internacional**, Rio de Janeiro, v. 37, n. 2, p. 661-691, May/Aug., 2015.

MÉXICO. ¿Qué es un Informe de Gobierno? **Presidencia de la República EPN**, Ciudad de México, Sept. 1, 2015. Available at: <https://bit.ly/2J4SrpH>. Access on: July 1, 2019.

MENDOZA CORTÉS, A. P. Operaciones del Ejército Mexicano contra el tráfico de drogas: revisión y actualidad. **Política y Estrategia**, Santiago, n. 128, p. 17-53, 2016.

MÉXICO. Câmara de Diputados. **Constitución Política de los Estados Unidos Mexicanos**. Ciudad de México: Câmara de Diputados, Feb. 5, 1917.

MÉXICO. **Segundo Informe de Gobierno 1984**: que rinde ante el H. Congreso de la Unión, Miguel de la Madrid H., presidente constitucional. Ciudad de México: Presidencia de la Republica, 1984.

MÉXICO. **Tercer Informe de Gobierno 1985**: que rinde ante el H. Congreso de la Unión, Miguel de la Madrid H., presidente constitucional. Ciudad de México: Presidencia de la Republica, 1985.

MÉXICO. **Cuarto Informe de Gobierno 1986**: que rinde ante el H. Congreso de la Unión, Miguel de la Madrid H., presidente constitucional. Ciudad de México: Presidencia de la Republica, 1986.

MÉXICO. **Quinto Informe de Gobierno 1987**: que rinde ante el H. Congreso de la Unión, Miguel de la Madrid H., presidente constitucional. Ciudad de México: Presidencia de la Republica, 1987.

MÉXICO. **Sexto Informe de Gobierno 1988**: que rinde ante el H. Congreso de la Unión, Miguel de la Madrid H., presidente constitucional. Ciudad de México: Presidencia de la Republica, 1988.

MÉXICO. Câmara de Diputados. **Informes Presidenciales** – Carlos Salinas de Gortari. Ciudad de México: Centro de Documentación, Información y Análisis, 2006a.

MÉXICO. Câmara de Diputados. **Informes Presidenciales** – Ernesto Zedillo Ponde de León. Ciudad de México: Centro de Documentación, Información y Análisis, 2006b.

MÉXICO. **Primer Informe de Labores**. Ciudad de México: Secretaría de la Defensa Nacional, 1 sept. 2007. Available at: <https://bit.ly/2XfBaCG>. Access on: Nov. 18, 2018.

MÉXICO. **Primer Informe de Labores**: 2012-2013. Ciudad de México: Secretaría de la Defensa Nacional, 1 sept. 2013a. Available at: <https://bit.ly/N48t2X>. Access on: July 1, 2019.

MÉXICO. **Plan Nacional de Desarrollo 2013-2018**. Ciudad de México: Gobierno de la República, 2013b.

MÉXICO. Câmara de Diputados. **Ley de Seguridad Interior**. Ciudad de México: Câmara de Diputados, 21 dic. 2017. Available at: <https://bit.ly/31S0zRC>. Access on: June 26, 2019.

QUESADA, J. D. A DEA quer cobrar sua vingança. **El País**, México, 16 Aug. 2013. Available at: <https://bit.ly/2X7u43g>. Access on: Nov. 2, 2018.

RODRÍGUEZ BUCIO, L. Retos Enfrentados por las Fuerzas Armadas durante su participación en la estrategia de combate al narcotráfico del Presidente Felipe Calderón Hinojosa. **Revista Internacional de Ciencias Sociales y Humanidades**, Ciudad Victoria, v. XXVI, n. 2. p. 205-227, July/Dez., 2016.

ROSEN, J. D.; ZEPEDA, R. Una década de narcoviolencia en México: 2006-2016. In: BENÍTEZ MANAUT, R.; AGUAYO QUEZADA, S. (ed.). **Atlas de la Seguridad y la Defensa de México 2016**. Ciudad de México: Colectivo de Análisis de la Seguridad con Democracia; Instituto Belisario Domínguez, 2016. p. 55-66.

SANTANA, A. A globalização do narcotráfico. **Revista Brasileira de Política Internacional**, Brasília, DF, v. 42, n. 2, p. 99-116, 1999.

SANTOS, M. H. C. A nova missão das forças armadas latino-americanas no mundo pós-Guerra Fria: o caso do Brasil. **Revista Brasileira de Ciências Sociais**, São Paulo, v. 19, n. 54. p. 115-128, Feb., 2004.

TANNO, G. A contribuição da Escola de Copenhague aos Estudos de Segurança Internacional. **Contexto Internacional**, Rio de Janeiro, v. 25, n. 1. p. 47-80, Jan./Jun., 2003.

VALENCIA, A. P. **A função social do exército mexicano**: atividades no campo social e as operações contra o narcotráfico. 1992. 42 f. Monografia (Curso de Comando e Estado-Maior do Exército) – Escola de Comando e Estado-Maior do Exército, Rio de Janeiro, 1992.

# On employing Air Power for the benefit of the Ground Force

*Una visión del uso del Poder Aéreo en beneficio de la Fuerza Terrestre*

**Abstract:** This study is a reflection on the application of Air Power in support of Ground Forces, addressing this combination's ability to guide modern combat and ensure success in war, given the flexibility of air assets. A qualitative, deductive and bibliographically based research method, supported by content analysis, was used to broaden the horizons set forth by Douhet, Mitchell, Seversky, and Warden, discussing the role of Army Aviation at the operational and tactical levels. The potential for organizational innovation is suggested, influencing the Ground Force's restructuring and managerial model. Finally, the study suggests that the notion of strictly strategic Air Power employment has been surpassed, considering the participation in recent fighting not only of Air Force air assets at the strategic level, but also of Ground Force air assets at the operational and tactical levels. It also demonstrates how Army Aviation is able to provide the necessary support to troops in the ground, enhancing Ground Force capabilities.

**Keywords:** Military Sciences. Military Operations. Air Strategy. Air Power. Military Aviation (Army).

**Resumen:** Se trata de una reflexión acerca de la aplicación del Poder Aéreo, en particular junto a la Fuerza Terrestre, abordando su capacidad para conducir combates modernos y la garantía de éxito en la guerra, debido a la flexibilidad de los medios aéreos. Con un sesgo cualitativo, el método de investigación utilizado fue deductivo y basado en la literatura, apoyado por el análisis de contenido, proponiendo una reflexión sobre el Poder Aéreo; esencialmente, se busca ampliar el horizonte sobre las propuestas de Douhet, Mitchell, Seversky y Warden, demostrando la acción de la Aviación del Ejército a nivel operacional y táctico. Se sugiere el potencial de innovación organizativa que influye en la reestructuración y en el modelo de negocio de la Fuerza Terrestre. Finalmente, el estudio sugiere una maduración en términos de empleo estrictamente estratégico, dada la participación no sólo de los medios aéreos de la Fuerza Aérea a nivel estratégico, sino también de la Fuerza Terrestre a nivel operativo y táctico, en los últimos combates, además de demostrar la capacidad de los medios de Aviación del Ejército de proporcionar el apoyo necesario a las tropas de superficie, reforzando de esta manera las capacidades de la Fuerza Terrestre.

**Palabras clave:** Ciencias Militares. Operaciones militares. Estrategia Aérea. Poder Aéreo. Aviación Militar (Ejército).

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## 1 Introduction

The use of air assets in support of military operations dates back to World War I, with the integration of air vectors into conflicts and the development of a sophisticated conceptual and doctrinal framework.

The scientific-literature origins of the use of the airspace for military purposes are also in World War I, the time of works such as *The Command of the Air*, by Giulio Douhet (1927) and *Victory Through Air Power*, by Alexander Seversky (1942). This tradition continued with Billy Mitchell, Trenchard, Boyd, Warden, Pipe, and Meilinger, among others, and was consolidated in the creation of a specific locus of study, whose basic propositions are underpinned by these thinkers' views – Air Power Theory.

Accelerated by the outbreak of the First World War, air power emerged as an important element of military power virtually as soon as aviation itself came to be. The evolution of Air Power continued throughout the 1990s, driven by innovation in science and technology, such as aerodynamics, metallurgy, propulsion, communication, electronics, among others. This occurred mainly due to the increased security concerns of the world's major powers (GRAY, 2009). As such, Air Power is the synergistic application of air, space, and information systems to project a country's global strategic military power (UNITED STATES, 2011).

In World War I's static clashes, victory was gained by controlling the battlefield with linearly distributed forces. People far from combat areas hardly felt threatened, since the conquest of territories by the enemy would have required one's defensive lines to be broken. With Air Power's increasing importance, war made inroads into national territory (COOLING, 1993), transforming air operations into an effective support element (WELLS, 2009), imposing a new operational rhythm, and threatening countries' security (MUELLER, 2010).

In view of the evolution of combat in air space, there have been numerous attempts to update Air Power's postulates. However, technological advances usually pay no heed to theoretical debates. In World War II, for instance, attempts to implement Douhet's (1927) and Mitchell's (JONES, 2004) ideas about strategic bombing were foiled by the inaccuracy of the available bombs (COHEN, 1993). In the Vietnam War, precision was achieved with laser-guided bombs, but the lack of a coherent plan once again frustrated the implementation of theories (THOMPSON, 2010; UNITED STATES, 1992). As a matter of fact, the Gulf War set the stage for the first technologically informed and rationally planned use of Air Power (UNITED STATES, 1992). In all Gulf War clashes, aircraft proved themselves as relevant instruments.

Since the twentieth century, parallel to the revolution of Air Power instruments – defined by the frequent use of ballistic and cruise missiles, information systems and precision munitions – opponents have made a point of investing in new techniques and tactics, avoiding the massification of forces and instead often opting for selective and fast attacks. Conflict analysis has progressively contributed to preparation against these new techniques and tactics. One of its observations concerns the fact that Army Aviation Units are more relevant for operations in confined, reconnaissance and security environments, rather than deep attacks (JOHNSON, 2006).

The flexibility of Army Aviation Units enables them to be used at several levels, from the strategic to the tactical. This contradicts the very foundations of Douhet's (1927) and Mitchell's

(JONES, 2004) theories, since they stand for the idea of an independent air power. This article discusses the potential contributions of Air Power to the Ground Forces (GFs)<sup>1</sup>, at the operational and tactical level. This discussion occurs against the background of Air Power Theory's basic propositions, as Meilinger (1995) formulates them.

In addition, this debate focuses on the use of the Ground Force's organic air assets, verifying its power-projecting capabilities to achieve operational and tactical objectives via helicopter exploration of airspace. Other perspectives for the use of Air Power are admitted, although they are placed within the same frame of reference. Our discussion aims to contribute to the strengthening of Defense perspectives and to the consolidation of Military Sciences, while providing a conceptual framework for the debate on the roles of Air Power.

This text has four sections, including this introduction. In the second section, we present a discussion on the strategic use of Air Power – encompassing strategic employment, effect-based operations and the comprehensive approach – either confronting or corroborating Meilinger's propositions. In the third section, following the same line of thought as before, the concepts of offensive capability and parallel war are discussed. In the fourth and final section, we present perspectives on the use of air assets alongside GFs.

## 2 Methodological referential

Methodologically, the text is structured as a qualitative research, seeking new teachings and knowledge based on different points of view. Its goal is to contribute another view on the subject, not quantify the facts. The purpose of the information collected here is to deepen and elucidate knowledge, working with a universe of meanings that is not limited to numerical variables (MINAYO, 2001).

This research is a bibliographical review of previously analyzed theoretical references. It investigates and confronts the questions in our purview, using Meilinger's propositions as a main point of reference (1995). By combining different perspectives with these propositions, we are able to better understand the evolution in the use of Air Power at different geostrategic instances, particularly at the operational and tactical levels, where it may subsidize the organization of networks and alliances (PARIS, 2004). Beyond the definition of a methodology, this analysis has been based on a detailed plan. Its entire design is premised on a dense theory, which validates this work (DEACON, 2012).

A fair investigation is attained by a systemic and complementary examination of all sources, opposing opinions, building new perspectives without seeking to close the discussion, and making the investigative process transparent. Examples are the use of articles published by the *Air & Space Power Journal* and *The United States Army War College*, which show the views of the Air Force and the US Army, respectively, regarding the use of Air Power at different geopolitical levels.

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<sup>1</sup> Brazilian Army instrument of action for Broad Spectrum Operations; includes all elements organized according to capability-based combat modules (BRAZIL, 2014).

In this context, be it in the national community or the international community, the Air Force and the Army (particularly Army Aviation) have divergent perspectives regarding the geopolitical use of Air Power. Thus, this study presents a reflection on the battlefield's 3rd dimension from the perspective of the Ground Force, particularly considering the use of helicopters.

Given the abovementioned divergence, data collection was deepened via the selection and analytical reading of sources. After this process, our observations were consolidated, with the relevant points being confronted. This contributed to the identification of more works, which were then considered for inclusion or exclusion in order to gather more perspectives on the combined use of air assets and Ground Forces. The research was conducted in the journals listed in Chart 1, and spanned from January 4 to June 30, 2017. The literature review included articles and magazines dealing with Air Power. The language used for research on international websites was mainly English, due to the limited collection of publications in the Portuguese language.

Chart 1 – Details of terms mapping in the literature.

Database	Search strings
<i>Google Academic</i> <i>Scientific Electronic Library</i> <i>SciELO</i> <i>Science Direct</i> <i>CAPES</i> <i>SAGE journals</i> <i>Routledge</i> <i>Fundação Getúlio Vargas</i> <i>RAND Corporation</i> <i>OTAN</i> <i>Defense Technical Information Center</i> <i>Military Operations Research Society</i> <i>U. S. Army Training and Doctrine Command / Combined Arms Center Repository / Heritage and Education Center</i> <i>The United States Army War College</i> <i>Military Operations Research Society</i> <i>Air &amp; Space Power Journal</i>	<i>Strategy</i> <i>Violence</i> <i>Aviation Battalion</i> <i>Effect-based operations</i> <i>Comprehensive Approach</i> <i>Close combat</i> <i>Parallel operations</i> <i>Gulf War</i> <i>Korean War</i> <i>Vietnam War</i> <i>Afghan War</i> <i>Air Power</i>

Source: Author (2017).

The research considered works published since World War I (WWI) in chronological order. Since a complete historical survey of Air Power was not feasible, the experiences of the Gulf War and the Afghanistan War were our main focus. Other criteria were: language (Portuguese/English/Spanish), types of documents (original article/review), area of knowledge (strategy), and geopolitical space (given our focus on the experiences of NATO countries and their partners). We identified 133 articles, a vast production on the application of air assets and its doctrine. Most were published in the English language.

As for military theories, it is worth noting that Air Power theory and science are based on universal concepts aimed at controlling uncertainties. Science provides knowledge with a linguistic basis, translating it into conceptual perspectives and schematics. Military theory precludes improvement exclusively by means of tests in a controlled space, or via doctrine and technology alone. Thus, knowledge obtained from the experience of war is of the utmost importance. In this sense, science provides military theory with a methodology for the analysis of interdisciplinary phenomena and experiences, creating a framework of new analytical conceptions, which are widely used in this research (BOUSQUET, 2009).

### **3 Air Power: from the strategic level to assets' integration at every level**

The strictly strategic use of Air Power is one of the main propositions of the theory's proponents. In WWI, the use of air assets progressed along a doctrine defined by deep target engagement, dissociated from terrain as a factor (JONES, 2004). These targets were regarded as centers of gravity (CoG). Hitting a CoG target would reduce or even entirely disrupt the enemy's combat possibilities (VAN CREVELD, 2011). The CoG could be a logistic structure, a command-and-control system (C2), an industrial complex, or even the enemy population itself (METS, 1999).

Some episodes in modern history have clearly been made possible by the idea of strategic Air Power employment. One such example in Normandy (1944), where the Allies blocked reinforcements and attacked the German Army's weaknesses by means of aerial bombings, disrupting the logistic system of German armored forces (WARDEN III, 1998). In the Gulf War (1991), Coalition Forces identified the enemy's C2 system, the Iraqi leaders and weapons of mass destruction as CoG targets (UNITED STATES, 1992). These targets were attacked using guided missiles connected to the global positioning system.

However, over time, the strictly strategic employment of Air Power advocated by Douhet and Mitchell has been considerably criticized. According to these criticisms, such thinking would be merely intended to garner budgetary resources and prominence in national security debates, in order to maintain the investment flow for air bombardment development – after all, critics say, the country's bombing doctrine has not changed since WWII (GRAY, 2009).

Based on the Gulf War's lessons, the US Armed Forces' doctrine of strategic Air Power employment underwent a reformulation (sometimes called a "Revolution in Military Affairs") (JOHNSON, 2006; MCMASTER, 2008), particularly in the US Air Force (USAF). One of the most important changes concerned the way attacks were modeled according to their effects, so as to shape the adversary's behavior (KELLY; KILCULLEN, 2006) without engaging definitively. This led to the concept of effects-based operations (EBO) (SMITH-WINDSOR, 2008).

The central tenet of EBO is the integration of military and civilian<sup>2</sup> assets in favor of the Desired End-State (THUVE, 2006), whether at the tactical, operational or strategic

<sup>2</sup> Military assets include not only Air Force, but also Army and Navy fire and aviation assets. Civilian assets can range from political actions to economic sanctions on the enemy.

level (MEILINGER, 1998). This amounts to a dissociation between assets employed at the geostrategic level. In the Gulf, the Coalition Forces used Air Force direct attack aircraft, long-range ground systems such as the Tactical Missile System (ATACMS), and US Army attack helicopters against the Iraqi air defense system, rendering Iraq virtually defenseless (MURRAY, 2002). However, the bombing theory underlying these operations was that of the WWII (GRAY, 2009).

In this context, air interdiction<sup>3</sup> was structured as an effective instrument against CoG targets, integrating Air Force and Ground Force assets in deep operations (WINTON, 1996). In Operation Desert Storm (1991), Task Force Normandy – the US Army Aviation Regiment helicopter task force – attacked Iraqi radar sites, paving the way for the taking of Baghdad. Subsequently, the Task Force began Close Combat Attacks (CCA) to consolidate operational and tactical objectives, enabling the battlefield to be quickly and flexibly shaped (UNITED STATES, 2007).

In Afghanistan (2001), attacks on insurgents employed US Air Force B-52 aircraft. Symbols of superior air power, the B-52s were deployed in deep attacks to support Northern Alliance tactical actions (LAMBETH, 2006). These attacks were a departure from conventional doctrine, since the enemy consisted of small scattered groups, hidden in caves and with portable weaponry, making it difficult to distinguish close areas from deep areas (BARAN, 2015). In these conditions, avoiding friendly fire required a high level of training (UNITED STATES, 2007). A workaround to this problem was the use of unmanned aerial vehicles (UAVs) for real-time information gathering (THORNBURG, 2009).

Thus, actions by the Ground Force's Task Force of helicopter and unmanned aerial vehicles proved effective at the operational and tactical level during the Gulf War (1991) and during the Afghanistan War (2001). From these experiences, the US Army was able to identify other opportunities to improve organic air assets in order to overcome the identified obstacles, especially in regards to strategic transport for the concentration of forces in the theater of operations (LILES; BOLKCOM, 2004).

Training-wise, the US Army saw improvements in CCA operations by training helicopter pilots under conditions that reflected the hot, high-altitude urban and desert environment found in Afghanistan and Iraq. This contributed to crew confidence, security and situational awareness (LILES; BOLKCOM, 2004).

Another important point was the integration of fixed-wing attack aircraft with artillery and Army helicopters, especially Apaches (AH-64). Such integration proved effective against close threats, as in the 101<sup>st</sup> Airborne Division's raid on the city of Karbala, Iraq, in 2003 (KUGLER, 2007).

This situation reinforced the argument that jointly employed heterogeneous assets facilitate the attainment of the intended effects, and that success is not just about target or weapon choice, but rather about military behavior (GRAY, 2009). Moreover, such success is also a reflection of the alignment

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<sup>3</sup> Pre-combat neutralization of forces, maintaining freedom of action (UNITED STATES, 2007).

of strategic objectives with the intended tasks and outcomes, coupled with an efficient decision-making process (GRAY, 1999) able to extrapolate the enemy's weaknesses (VICENTE, 2008).

Nevertheless, the inaccuracy of the metrics used in effects assessment, especially in actions with psychological or cognitive effects, and the methods used in asset integration led to criticisms against EBO (MATTIS, 2008). An example of this inaccuracy occurred in Operation Tora Bora, in Afghanistan (2001), where the analysis of the information system (essentially in regards to means of surveillance) was unable to compensate for the insufficient amount of forces guarding the exfiltration routes (BIDDLE, 2005).

A similar situation occurred in Operation Anaconda (2002), this time in respect to the assessment of the devices, armament and numerical strength of Taliban and Al Qaeda fighters in the Shah-i-Kot Valley (KUGLER, 2007). The less-than-dominant knowledge of the area of operations demonstrated that combat and intelligence means alone are not enough to overcome uncertainties.

Another problem faced by EBOs was personnel inexperience in conducting joint operations to support civilian populations, particularly in urban environments, restricting the attainment of pre-established objectives (SCOTT, 2017). Commanders and Chiefs-of-Staff analyzed the operational environment in order to assess the effects, without, however, expanding this assessment beyond the geographical dimensions of the battlefield – i.e., towards the political, economic and informational expressions of human behavior (VEGO, 2006).

Despite propitiating some doctrinal advances, particularly in joint action among different air assets, EBOs have definite flaws, especially in their understanding of the operating environment's culture, inter-agency integration, mission analysis, and periodic ratification or rectification of plans (MATTIS, 2008), becoming demonstrably inefficient in the face of changing or volatile information.

In modern combat, battlefields have lost all of their former rigidity and moved on to a paradigm marked by undefined fronts and scattered adversaries. Operations have become a part of the larger societal problem in situations of civil unrest, famine and epidemics, thus contributing to human degradation. This degradation is a barrier to the reconstruction of peace and stability, and it is thus necessary to gain the trust of local leaders and to legitimize military actions under the lens of the international media. In this sense, one must have flexibility, merging different tasks and proactively promoting inter-actor cooperation (COLÓN, 2011).

War has become increasingly irreducible. The tendency towards the uncontrollable leads to a balancing act between ends, means and costs, even while the rational overflows into an irrational, chaotic, and violent conflict (CLAUSEWITZ, 1976). Thus, the need for a doctrinal basis defined by collaborative, information-sharing principles has motivated the development of the Comprehensive Approach. Joint operations<sup>4</sup> have become a significant object of investment, marked by a sharp awareness of the nature of problems and the purpose of actions, so as to generate stable resources in an environment of uncertainty and chaos. In this context, the integrative management of military and civilian efforts has enabled a view in which success is not found solely in the use of military power, but in integrating different fields of power in favor of representativeness (COLÓN, 2011).

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<sup>4</sup> Joint Operations are characterized by the use of assets from more than one Singular Force, under a single command (BRAZIL, 2011).

In this new doctrinal conjuncture, civilian-military integration proposes a better adaptation to threats and public opinion, as these threats are organized in amorphous and interconnected networks. Meanwhile, coordination and joint management of skills enable rationality and systematization in the application of force and in the assessment of possibilities and challenges of multidimensional and dynamic environments – such as Iraq and Afghanistan (HOFFMAN, 2007). To this end, information operations have grown in magnitude to enable a superiority of knowledge about the operating environment (JOHNSON, 2006).

Some Armed Forces have incorporated participatory behaviors involving goals and tasks, connecting different systems with flexible protocols and goal assessments, and integrating information and logistics networks in favor of changes in military culture, refuting the monolithic character of the operational and organizational systems proposed by Warden III (1998) and Meilinger (1995). This paradigm shift has led to increased situational awareness and joint cooperation in regular stabilization and reconstruction operations – as seen in Afghanistan (2001) – overcoming inter-personnel challenges and the complexity of the inter-agency environment.

Thus, the incorporation of a participatory behavior has resulted in significant changes of organizational structure. These changes required an evolution of the various Armed Forces subsystems. An example is the restructuring of US Army Aviation, particularly during the Afghanistan War (2001), made possible by the adoption of modular, adaptable and agile brigades defined by sustainability and smaller structures – the Multi-Functional Aviation Brigades (MFAB). These modular brigades were able to successfully carry out a number of attack, defense and stabilization missions. In this sense, they acted as force multipliers, qualified for broad spectrum operations (BARAN, 2015). Thus, an even deeper integration of Air Units with UAVs – now equipped with accurate munitions, and able to isolate and destroy enemy forces – was made possible (SCOTT, 2017).

These changes went beyond the Armed Forces' conceptual and structural basis, also affecting the equipment involved in combat operations, allowing for more efficient action and offensive capability. Modifications made to US Army attack helicopters (essentially AH-64 aircraft) during the Afghanistan (2001) campaign are one example. The helicopters were retrofitted with Aircraft Survivability Equipment (ASE) such as electronic countermeasure systems and radar warning and missile alert systems, enabling them to provide better troop support. However, these countermeasures proved ineffective against the weapons used by insurgents, emphasizing how virtual simulation is required for training specific maneuvers, as proficiency in performing these maneuvers increases survivability in hostile environments (KELLEY, 2013).

For these new structures and combat assets to be successful, more flexible leaders had to be trained, able to respond quickly by means of integrated air-to-ground maneuvers at the operational and tactical levels. To this end, adjustments in the training process were carried out – such as the inclusion of simulators – so technical and tactical skills could be maintained, increasing the proficiency of leaders (CURRAN, 2001).

In any case, Air Power strategy has evolved significantly, enabling greater integration between air assets at the strategic, operational and tactical levels, in contrast to Meilinger's (1995) proposition

and Douhet's (1927) idea of strictly strategic employment. This is due to the increased complexity of the operating environment and the integration of military and civilian assets not only for the benefit of the Joint Command, but also to allow for the realization of the Comprehensive Approach.

However, the principle of strategic Air Power employment remains relevant to the achievement and maintenance of local air superiority, as the air-controlling force will potentially have control of the battlefield (DOUHET, 1927), establishing a relationship between air security and surface operations.

Finally, the integration and coordination of air and ground assets has become essential to achieving end goals in the complex environment of modern fighting, alleviating and controlling collateral effects.

#### **4 Concurrency of actions: an effort-multiplying factor**

Air Power's offensive vocation and ability to multiply efforts (MEILINGER, 1995) strengthen the possibility of action at all battlefield levels, whether strategic, operational or tactical. Since the Contemporary Age, the Art of War has solidified the central tenets of troop command. In the early nineteenth century, strategy was applied in a logical way to overcome the enemy, flexibly making use of violence to obtain the desired end goals (COUTAU-BÉGARIE, 2010).

Flexibility in the use of Air Power violence is explored in the concept of Parallel Operations (PO), which results from the aeromobility of assets carrying out actions characterized by simultaneous amplitude and depth, across different points on the battlefield (SEVERSKY, 1988). This mitigates operational risks and creates conditions of inadequacy for enemy forces, decreasing the likelihood of reaction and ensuring enemies lose their situational awareness (UNITED STATES, 1993).

Within Parallel Operations, understanding the opponent's devices and possibilities, coupled with robust action – employing the element of surprise as well as physical and psychological shock – are necessary requirements for the degradation of opposing forces through joint action on the dimensions of time, space and at the geostrategic level (DEPTULA, 2001a).

During the first Gulf War, these dimensions were characterized in a particular way. In the time dimension, success meant the ability to engage 50 targets in the initial 90 minutes of combat; in the space dimension, it regarded the ability to act in both amplitude and depth, neutralizing the various critical defense systems; and in the geostrategic level, it referred to the simultaneity of actions at the tactical, operational and strategic instances, in order to precipitate the enemy's collapse (DEPTULA, 2001b).

Another relevant aspect of Parallel Operations is the targeting process. The correct selection of the opponent's vital points (VAN CREVELD, 2011), restricting its ability to repair and adapt to the situation, enables a cost-effective use of assets by friendly forces. This leads the enemy to lose its willingness to fight, without causing total annihilation (WARDEN III, 1998). According to Clausewitz (1976), a successive use of forces causes the outcome of the combat to be postponed, whereas a simultaneous use of forces almost always anticipates it to the beginning, although such an anticipated outcome is not necessarily definitive.

Exemplifying such a situation of simultaneous use of forces, Meilinger (1995) speaks of the British Forces' bombing of German industrial parks while, at the same time, US Forces fought the Luftwaffe for the conquest of air superiority in World War II and other aircraft hunted submarines, blocking the passage of reinforcements to Rommel in North Africa during the Battle of the Atlantic. This made it difficult for German forces to resume operations. Despite the various actions taken during WWII, the principles of Parallel Operations were not fully explored because the desired air superiority was never obtained, allowing German forces to recover. This delayed the planned outcome of systemic enemy paralysis (SPANGRUD, 1987).

During the first Gulf War (1991), the US air campaign plan foresaw four sets of targets whose neutralization would progressively cause the isolation of Iraqi leaders, the conquest of local air superiority, the neutralization of weapons of mass destruction, the reduction of enemy offensive capability and, finally, the isolation of Iraqi troops in Kuwait (UNITED STATES, 1992). This was a clear demonstration of how the targeting process had been refined.

In the first two days of combat, numerous aircraft engaged different types of targets with synergy and synchronization, leading to an anticipated outcome. Assets such as Air Force laser-guided bombs, air-to-ground missiles, Army helicopters, and US Navy Tomahawk missiles were employed (UNITED STATES, 1992). Although this concerted initiative failed to eliminate enemy reaction (DEPTULA, 2001b), it was successful in severely limiting the enemy's movement and ability to resupply, reorganize defenses and organize counterattacks (WARDEN III, 1995, 1998).

Lessons learned from this experience made it possible for two new goals to be set in order to consolidate Parallel Operations during the First Gulf War (1991): the conquest of strictly local air superiority in an air-to-air operation at the behest of the Air Force, and the suppression of enemy air defense by the integration and coordination of Air Force, Army and Navy assets, thereby building the parallel action of the different combat forces. Thus, Army offensive aircraft and Air Force bombings were deployed within a tactical-strategic continuum involving attacks against various types of targets.

In addition to the targeting process, airborne aeromobility directly benefits Parallel Operations, enabling the transposition of obstacles such as rivers and valleys, and subjecting the enemy to multiple strikes (DOUHET, 1927). This amounts to an ability to attack at different geostrategic levels, materializing the notion of ideal war evoked by Clausewitz (1976). Moreover, aeromobility makes it possible to maneuver with speed and agility, positioning and repositioning forces, which integrates air and ground maneuvers and provides operational and tactical advantages, allowing for timely maneuvers and early warning of enemy movements (UNITED STATES, 2014).

In addition to aeromobility, the increase in radar signature reduction (stealth) and the accuracy of laser-guided munitions provide even more advantages and combat power to air assets, greatly enhancing their covert operability (DEPTULA, 2001a). In the Gulf War (1991), munitions had an accuracy error of less than 10 ft (COHEN, 1993, thanks to laser guidance. In contrast, despite the qualified and skillful crews, WWII bombing operations often fell short of their goals, as only about 20% of the bombs landed within about 1,000 ft of the designated targets (SPANGRUD, 1987).

However, in the Afghan War, engagement between aircraft and Al Qaeda fighters occurred close to ground troops, compromising the air support provided by fixed-wing aircraft due to the high altitudes and restrictions imposed by the US Air Force (given the risk of friendly fire). In this context, Army AH-64 helicopters became critical for close fire support. In addition, the increased lethality and accuracy of new munitions such as the Low Cost Precision Kill (LCPK) rocket ensured better control of collateral damage, as well as efficiency against infantry combatants and light armored vehicles (WIGGINS, 2003). Similarly, the CH-47 and MH-47 transport helicopters were proven flexible in repositioning troops due to their significant power and internal carrying capacity (JOHNSON, 2006).

Besides the use of the Aviation Battalions, another contribution to the success of Parallel Operations was the implementation of the BAE (Brigade Aviation Element). These elements allowed better integration, coordination and synchronization between the planning and execution of Army Aviation Battalion maneuvers, promoting a more adequate close fire support and, above all, avoiding friendly fire (MCMASTER, 2008). They also influenced the evolution and modernization of doctrine, training and equipment (KUGLER, 2007; LAW, 2012).

As a result, targeting capabilities, aeromobility, new technologies, and linkage elements insertion, coupled with flexibility in the Air Power's use of violence, strengthened Parallel Operations, destabilizing the power balance and causing the enemy to shutdown in a shorter amount of time, as well as reducing the friendly force's wear and risks.

The lessons learned from the Gulf Wars and Afghanistan show that Army Aviation assets are contributing to enhancing Ground Force and Joint Command capabilities. Armed reconnaissance, security operations, air combat, deep attacks and medical evacuation are some of the ways aviation has been able to promote a greater preservation of combat power.

The concept of Parallel Operations, along with the principle of airborne offense, is also useful in maintaining allied forces' initiative, freedom of action and a genuine situational awareness, controlling collateral damage, bringing the war to the enemy, and making counterattacks unfeasible. This was seen in Iraq and Afghanistan.

## 5 Final considerations

Air Power's integration with Ground Forces is ever increasing. This is becoming evident in broad spectrum operations, in which such integration enhances the capabilities of Ground Forces, mainly due to the flexibility allowed by air assets. Allied action in the Gulf Wars and Afghanistan are clear examples of such flexibility. In addition, the minimization of risks and reduction of the resources and time used for reaching the desired objectives leads to a reduction in operating costs.

This article discussed Meilinger's (1995) propositions about Air Power: Air Power has to be employed in a strictly strategic manner; Parallel Operations can be carried out at all

levels of war; and Air Power is a primarily offensive weapon. We have also demonstrated that Air Power Theory can be used to strengthen the operating capabilities of ground assets, especially ground troops.

The first proposition was broadly rebutted by the advent of the Comprehensive Approach. Such a rebuttal is a clear example of doctrinal evolution. The latest major conflicts, such as the Gulf War and Afghanistan, show that the central tenet of Air Power as a strictly strategic resource has matured, considering the recent application of air assets belonging not only to the Air Force, but also to the Ground Forces, at the operational and tactical levels. Examples are Operation Anaconda (2002) and the incursion into Karbala (2003).

The propositions regarding Air Power's offensive character and the possibility of Parallel Operations at all levels of war corroborate the notion that flexibility and aeromobility are essential traits of Army Aviation assets, allowing them to provide the necessary support to surface troops, especially at the operational and tactical levels.

A reflection on these three propositions shows that flexibility and offensiveness of air assets make it possible for them to be employed at the operational and tactical levels, and not only at the strategic level. Moreover, the roster of Army Aviation aggregate capabilities may include the possibility of conducting close fire support to the Ground Force, with the interdependent use of dominant maneuvers, precise engagement, and the integration of aircraft and unmanned aerial vehicle systems.

As the focus and challenges of the operating environment continue to evolve, changes in the global geopolitical scenario have led to a reevaluation of projected national security risks, forcing the Armed Forces to adapt so they can keep attaining National Defense Strategy (BRASIL, 2012) objectives concerning the preservation of the sovereignty and integrity of the national territory.

To this end, the clarification of national defense guidelines is important – so that people who diverge or are confused can conceive of a more effective and strategic view of the use of Air Power alongside Ground Forces. The necessary sacrifices may lead to the consolidation of a fighting power superior to the current one, allowing us to prepare for an uncertain future.

Doctrinal evolution regarding the strategic use of Air Power sets new perspectives for flexibility in the use of air assets, not only at the strategic level but also at the operational and tactical levels, enhancing existing skills and making it possible to set a new operative pace to military conflict, with the transposition of natural obstacles and the optimization of time.

This evolution also emphasizes integration and cooperation between the military and civilian segments, increasing situational awareness and maintaining a constant re-validation of actions in order to reduce collateral damage, especially to the population. Moreover, this integration and control facilitate the maintenance of public opinion support for military operations, according to the precepts of the Comprehensive Approach.

Army Aviation Battalions can perform innumerable actions in both amplitude and depth, leading the enemy towards irreversible wear as a result of the division of forces in an attempt to mitigate damage to sensitive points. Combined with the Parallel Operations *modus*

*operandi*, these actions strengthen existing capabilities and enable precise attacks on the enemy's defensive system, solidifying offensive actions, reducing Ground Force wear, and enhancing military operations' ability to adapt to complex environments.

A translation of this analysis to the reality of the Brazilian Army shows that the inclusion of air assets in the Ground Force structure can lead to significant doctrinal improvements, contributing to the building of asset interoperability. Such an interoperability requires further doctrinal evolution within the Armed Forces, especially in respect to Joint Operations and inter-agency relations. There must be cooperation and integration between civilian and military capabilities in favor of building a unified planning, regardless of operational level, in opposition to the parochialism of each Force or Agency.

The integration of rotary-wing aircraft and unmanned aerial vehicles (UAVs) has provided for further doctrinal evolution, promoting synergy between combat assets, with helicopters performing close reconnaissance, attacks and close combat, and UAVs enabling real-time situational awareness of the area of operations. Meanwhile, reliable digital communication systems help provide air support to troops in the ground (UNITED STATES, 2017), as well as flexibility against threats.

Besides doctrinal improvement, technological innovation is also a factor in the transformation of the Armed Forces. The incorporation of new technologies leads to organizational renewal, requiring the implementation of training in virtual environments in order to overcome existing technical and tactical deficiencies, as shown by Afghanistan (KELLEY, 2013).

Finally, the lessons learned in the latest conflicts demonstrate the need for the integration of expressions of power, treating military power as more than a means for achieving political goals. These lessons corroborate the necessity of interoperability of military and civilian capabilities in the broad-spectrum environment characteristic of the 21st century. Thus, deepening the use of Air Power Theory within the Army will help both the Ground Force and the Joint Command attain their desired objectives.

## References

BARAN, B. **The Evolution of the U.S. Army Aviation During Operation Enduring Freedom in Afghanistan.** 2015. Dissertação (Mestrado em Military Art and Science) – United States Army Command and General Staff College, Leavenworth, 2015.

BIDDLE, S. D. A. Airpower and Modern Warfare: The Afghan model in Afghanistan and Iraq. **International Security**, Cambridge, v. 30, n. 3, p. 161-176, 2005.

BRASIL. Ministério da Defesa. **Doutrina de Operações Conjuntas (MD30-M-01).** Brasília, DF: Ministério da Defesa, 2011. V. 1.

BRASIL. Ministério da Defesa. **Política Nacional de Defesa e Estratégia Nacional de Defesa.** Brasília, DF: Ministério da Defesa, 2012.

BRASIL. Ministério da Defesa. **Manual de Fundamentos:** Doutrina Militar Terrestre. Brasília, DF: Ministério da Defesa, 2014. EB20-MF-10.102.

BOUSQUET, A. **The Scientific Way of Warfare:** order and chaos on the battlefields of modernity. New York: Columbia University Press, 2009.

CLAUSEWITZ, C. V. **On War.** Princeton: Princeton University Press, 1976.

COHEN, E. A. **Gulf War Air Power Survey, Volume II:** operations and effects and effectiveness. Washington, DC: United States Department of Defense, 1993.

COLÓN, G. Das operações baseadas em efeitos à Comprehensive Approach. **Nação e Defesa**, Lisboa, n. 129, p. 221-235, 2011.

COOLING, B. F. (ed.). **Case Studies in the Development of Close Air Support.** Washington, DC: Office of Air Force History, 1993.

COUTAU-BÉGARIE, H. **Tratado de estratégia.** Tradução: Brigitte Bentolila de Assis Manso. Rio de Janeiro: Escola de Guerra Naval, 2010. V. 1.

CURRAN, J. M. Moving Out to the Objective Force. **Army Aviation**, August-September, v. 8, 2001.

DEACON, T. W. **Incomplete Nature:** how mind emerged from matter. New York: W. W. Norton & Company, 2012.

DEPTULA, D. A. **Effects-Based Operations:** change in the nature of warfare. Arlington: Aerospace Education Foundation, 2001a.

DEPTULA, D. A. Firing for Effects. **Air Force Magazine**, Arlington, v. 84, n. 4, apr. 2001b.

DOUHET, G. **The Command of the Air**. New York: Coward-McCann, 1927.

GRAY, C. S. The Dimensions of Strategy. In: GRAY, C. S. **Modern Strategy**. Oxford: Oxford University Press, 1999. p. 16-47.

GRAY, C. S. **Understanding Airpower**: bonfire of the fallacies. Montgomery: Air University Press, 2009.

THUVE, H. **A state-space formulation for Effects-Based Operations**. NATO Consultation Command and Control Agency The Hague (Netherlands). Fort Belvoir, VA: Defense Technical Information Center, 2006.

HOFFMAN, F. G. **Conflict in the 21st Century**: the rise of Hybrid Wars. Arlington: Potomac Institute for Policy Studies, 2007.

JOHNSON, D. E. **Learning Large Lessons**: the evolving roles of Ground Power and Air Power in the Post-Cold War era information. Santa Monica: RAND Corporation, 2006.

JONES, J. R. **William “Billy” Mitchell’s Air Power**. Honolulu, Hawaii: University Press of the Pacific, 2004.

KELLEY, M. From Tactical Operations Officer to the Aviation Survivability Program. **Aviation Digest**, Dalton, v. 1, n. 2, 2013.

KELLY, J.; KILCULLEN, D. Chaos Versus Predictability: a critique of effects-based operations. **Australian Army Journal**, Canberra, v. 2, n. 1, p. 87-98, 2006.

KUGLER, R. L. **Operation Anaconda in Afghanistan**: a case study of adaptation in battle. Washington, DC: National Defense University, 2007.

LAMBETH, B. S. **Air Power Against Terror**: America’s conduct of operation enduring freedom. Santa Monica: RAND Corporation, 2006.

LAW, D. **United States Army Aviation Organizational Changes**. 2012. Dissertação (Mestrado em Military Studies) – School of Advanced Military Studies, Leavenworth, 2012.

LILES, C. F. M.; BOLKCOM, C. **CRS Report for Congress Military Helicopter Modernization**: background and issues for Congress. Washington, DC: Congressional Research Service, 2004.

MATTIS, J. N. USJFCOM Commander’s Guidance for Effects-based Operations. **Joint Force Quarterly**, Washington, DC, n. 51, p. 105-108, 2008.

MCMASTER, H. R. On War: lessons to be learned. **Survival**, v. 50, n. 1, p. 19-30, 2008.

MEILINGER, P. S. (ed.). **The Paths of Heaven**: the evolution of airpower theory. Montgomery: Air University Press, 1998.

MEILINGER, P. S. 10 Propositions Regarding Airpower. **United States Air Force (Air Force Historical Studies Office)**: Washington, 1995.

METS, D. R. **The Air Campaign**: John Warden and the classical airpower theorists. Montgomery: Air University Press, 1999.

MINAYO, M. C. S. **Pesquisa social**: teoria, método e criatividade. 18. ed. Petrópolis: Vozes, 2001.

MUELLER, K. P. **Air Power**. Santa Monica: RAND Corporation, 2010.

MURRAY, W. **Transformation Concepts for National Security in the 21st Century**. Collingdale: Diane Publishing, 2002.

PARIS, R. Introduction. In: ROLAND, P. **At War's End**: building peace after civil conflict. Cambridge: Cambridge University Press, 2004. p. 1-10.

SCOTT, K. D. **Joint Publication 3-0**: Joint Operations. Washington, DC: Joint Force Development, 2017.

SEVERSKY, A. P. **Victory Through Air Power**. New York: Simon & Schuster, 1942.

SEVERSKY, A. P. **A vitória pela Força Aérea**. São Paulo: Villa Rica, 1988.

SMITH-WINDSOR, B. Haste Slowly. NATO's effects based and comprehensive approach to operations: making sense of the past and future prospects. **Research Paper**, Roma, n. 38, p. 1-8, 2008.

SPANGRUD, T. **The United States Strategic Bombing Surveys**. Alabama: Air University Press, 1987.

THOMPSON, W. **To Hanoi and Back**: The U.S. Air Force and North Vietnam, 1966-1973. Washington, DC: Smithsonian Books, 2010.

THORNBURG, T. G. **Army Attack Aviation Shift of Training and Doctrine to Win the War of Tomorrow Effectively**. 2009. Dissertação (Mestrado em Military Studies) – School of Advanced Warfighting, Marine Corps University, Quantico, 2009.

UNITED STATES. Department of Defense. **Conduct of the Persian Gulf War**: final report to Congress. Washington, DC: Department of Defense, 1992.

UNITED STATES. Department of the Army. **FM 100-5 Operations**. Washington, DC: Department of the Army, 1993.

UNITED STATES. Department of Defense. **Attack Reconnaissance Helicopter Operations**. Washington, DC: Department of Defense, 2007.

UNITED STATES. Department of the Air Force. **Strategic Attack**: Air Force Doctrine Document 3-70 12 June 2007. Washington, DC: Department of the Air Force, 2011.

UNITED STATES. Department of Defense. **2020-2040 U.S. Army Operating Concept (AOC)**: win in a complex world. Washington, DC: Department of Defense, 2014.

UNITED STATES. Department of Defense. **The U.S. Army Functional Concept for Movement and Maneuver**. Washington, DC: Department of Defense, 2017. TRADOC Pamphlet 525-3-6.

VAN CREVELD, M. **The Age of Airpower**. New York: PublicAffairs, 2011.

VEGO, M. N. Effects-Based Operations: a critique. **Joint Force Quarterly**, Washington, DC, n. 41, p. 51-57, 2006.

VICENTE, J. A relevância estratégica do Poder Aéreo numa aproximação às operações baseada em efeitos. **Estratégia**. Lisboa: Instituto Português da Conjuntura Estratégica. v. 17, p. 233-257, 2008.

WARDEN III, J. A. The Enemy as a System. **Airpower**, Pittsburgh, v. 9, n. 1, p. 40-55, 1995.

WARDEN III, J. A. **The Air Campaign**: planning for combat. Collingdale: Diane Publishing, 1998.

WELLS, H. G. **The War in the Air**. Auckland: The Floating Press, 2009.

WIGGINS, P. L. **Army Aviation's Objective Force for the 21st Century**. Carlisle: U. S. Army War College, 2003.

WINTON, H. R. Partnership and Tension: The Army and Air Force between Vietnam and Desert Shield. **Parameters**, Carlisle, v. 26, n. 1, p. 100, 1996.



# Defense logistics: fundamentals of logistical process management and the transformation of the Brazilian Army.

*Logística de la defensa: fundamentos de la gestión de procesos logísticos y transformación en el Ejército Brasileño*

**Abstract:** The article discusses the theme of defense logistics, presenting the fundamentals of logistics process management. Considerations are presented on the logistic doctrine and the transformation process of the Brazilian Army, as well as guiding questions on the socioeconomic evaluation of logistic projects through the application of integrated models of actions in the territory, to be conceived and evaluated according to their capacity to attend the project needs. Important challenges stand out in the work, from the conception and implementation, to the operation and evaluation of logistics projects, aiming to produce a certain goal of satisfactory economic growth to fund and remunerate them. Regarding logistics and transportation factors, the importance of expanding the State's presence in more distant regions is emphasized, aiming to make the most of the advantages gained by the flexibility inherent to the mode of transport evaluated. The public policies and governmental actions based on land in the area are crucial to promote the region's development.

**Keywords:** Defense Logistics. Process Management. Brazilian Army.

**Resumen:** El artículo analiza el tema de la logística de defensa, presentando los fundamentos de la gestión del proceso logístico. Se presentan consideraciones sobre la doctrina logística y el proceso de transformación del Ejército Brasileño, así como preguntas orientadoras sobre el tema de la evaluación socioeconómica de los proyectos logísticos a través de la aplicación de modelos integrados de acciones en el territorio, para ser concebidos y evaluados de acuerdo con su capacidad de asistencia de las necesidades del proyecto. Se destaca un trabajo importante, desde la concepción y la implementación, hasta la operación y evaluación de proyectos logísticos, con miras a producir un cierto objetivo de crecimiento económico satisfactorio para financiarlos y remunerarlos. Con respecto a los factores de logística y transporte, se enfatiza la importancia de expandir la presencia del estado en regiones más distantes, con el objetivo de aprovechar al máximo las ventajas obtenidas por la flexibilidad inherente al modo de transporte evaluado. Las políticas públicas y acciones gubernamentales basadas en la tierra en el área son consideradas fundamentales para promover el desarrollo de la región.

**Palabras clave:** Logística de la Defensa. Gestión de Procesos. Ejército Brasileño.

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## 1 Introduction

This article addresses issues related to a relevant Defense theme. Aspects of logistic process management that are of interest to the Brazilian Army are addressed and related to the Force's ongoing transformation. In the second section, dedicated to theoretical foundations, we discuss considerations on the management of defense logistics processes and on the Logistic Doctrine, the Brazilian Army's process of transformation, and the importance of the Transport subsystem for Army Logistics.

The third section deals with concepts and approaches for the socioeconomic assessment of projects in the area of logistics and transport, highlighting the territorial engineering approach – a model that can be applied to the Brazilian Army's logistical operations, as analyzed in the case studies presented here.

The article's final considerations debate the importance of intermodal integration as a means of consolidating the state's presence in remote regions, aiming to take full advantage of the inherent benefits of different modes of transportation. Aspects regarding the possibility of integration with territory-based governmental policies, programs and projects are considered fundamental in assessing the Brazilian Army's actions within the Logistics subsystem.

## 2 Theoretical foundations

### 2.1 Initial Considerations on defense logistics process management

Logistics is an area of knowledge that addresses the problem of planning for and providing supplies and services needed to ensure the smooth functioning of an organization's systems of operation. According to Ballou (2010, p. 27), the dictionary definition<sup>1</sup> of the term 'logistics' refers to the branch of military science that deals with the procurement, maintenance and transportation of material, personnel and facilities – which places logistics in their military context. A broader definition of the discipline is also provided: it is the process of planning, implementing and controlling the efficient and effective flow of goods, services and related information from the point of origin to the point of consumption, for the purpose of meeting customer requirements<sup>2</sup>. Ballou also notes that the first textbook to suggest the benefits of coordinated logistics management was published in 1961<sup>3</sup>.

On the importance of logistics, specifically in relation to the dimension of logistics value, Bowersox *et al.* (2014, p. 37) emphasize that "logistics should be managed as an integrated effort to achieve customer satisfaction at the lowest total cost", and also propose that "the modern [logistical] challenge is to create value." In the field of defense, logistics has an outstanding strategic value, being considered an "art of preparation for war." It possesses all the

1 MERRIAM-WEBSTER. *Webster's new encyclopedic dictionary*. New York: Black Dog & Leventhal Publishers, 1993. p. 590.

2 According to the definition by the *Council of Logistics Management – CLM* ([www.clml.org](http://www.clml.org)).

3 SMYKAY, EW; BOWERSOX, J.; MOSSMAN, FH. **Physical distribution management**: logistic problems of the firm. New York: Macmillan, 1961.

characteristics of military science, except for combat. In fact, it emerged as a subject of scientific study in the military field, approached by notable scholars of War Sciences such as Klaus von Klausevitz and Antoine Jomini, among others.

The classic work by Sun Tzu (*The Art of War*) has a prominent place for logistics, which appear in several excerpts. One example is in Chapter X (Terrain):

[...] a power of estimating the adversary, of controlling the forces of victory, and of shrewdly calculating difficulties, dangers and distances, constitutes the test of a great general. He who knows these things, and in fighting puts his knowledge into practice, will win his battles. He who knows them not, nor practices them, will surely be defeated (SUN TZU, 2014, p. 122).

And in chapter XI of the work (The Nine Situations):

When you leave your own country behind, and take your army across neighborhood territory, you find yourself on critical ground. When there are means of communication on all four sides, the ground is one of intersecting highways. [...] On serious ground, I would try to ensure a continuous stream of supplies. On difficult ground<sup>4</sup>, I would keep pushing on along the road. (SUN TZU, 2014, p. 135).

Several current works, dealing with the theme of business logistics, present historical citations that highlight logistics and supply chain management as an important discipline, considered in the area of Military Science as a strategic factor for success. Christopher (2001, p. 1) illustrates the importance of logistics by referring to the United States independence process, commenting that it "has been argued that the defeat of the British in the American War of Independence can largely be attributed to logistics failure," and adding that in the first six years of the war, the administration of vital supplies (equipment and food) was "totally inadequate, affecting the course of operations and the morale of the troops."

The military man and writer Euclides de Cunha, author of famous work "Os Sertões", comments in his *Diário de uma Expedição* ("Diary of an Expedition") (CUNHA, 1897, our translation):

Still no news about the fighting. Yesterday another convoy left. It should be escorted in the climb by the 33rd Jueté battalion, as it enters the danger zone. General Carlos Eugênio has not yet departed and his delay may linger. Our situation, the fates of war now rest on the thousand or so donkeys indispensable for the transport of ammunition. This bizarre circumstance sums up the campaign's special conditions. Even if we had a hundred thousand men here in Monte Santo, our luck would hardly improve. One might even say it would worsen considerably.

<sup>4</sup> Difficult terrain (mountainous forests, stony steppes, marshes and swamps).

We are not short of men who are willing to die, riddled with bullets, for the Republic. But the Republic cannot demand from them the sacrifice of death by starvation. All of these difficulties arise largely from the adopted base of operations, wedged in the desert and in and of itself painful to gain access to. The ongoing convoys are the daily bread of our forces, and are insufficient. By a remarkable reversal of events, the two thousand men who stand ready to depart will be fighting not as auxiliaries, but rather as competitors in a deaf struggle against penury [Monte Santo, September 9–10, 1897].

Christopher (2001, p. 2) describes how logistics played an important role in World War II, especially in the Allied troops' landing operations in Normandy. As a matter of fact, Ballou (2010) characterizes the Allied invasion of Europe during World War II as the most complete and well-planned logistics operation in history. It is sufficient to note that, in this battle, the military alone held resources valued at about 1/3 those of all US manufacturing companies. Christopher also quotes German Marshal Rommel as reportedly having said that "... before the fighting proper, the battle is won or lost by quartermasters". Logistics were also particularly important in the Vietnamese resistance during the protracted Vietnam War (1952–1958), not to mention the "Desert Storm" American campaign in Kuwait and Iraq (1990–1991) (CASTRO, 2003).

Saudi Arabia was centrally located in the Persian Gulf Theater of Operations<sup>5</sup>, with several ports and airports being used for US troop disembarkation. However, this apparatus lacked sufficient road and rail systems, the logistical infrastructure needed to support US troops (by transporting supplies to advanced positions). This led to the establishment of a Logistics Command in the Theater of Operations, known as the 22nd Support Command (SUPCOM) in Saudi Arabia. The SUPCOM coordinated logistical actions and was used to support the displacement of forces in the region, preparing for the arrival of massive amounts of troops and equipment from Southeast Asia<sup>6</sup>.

Braz (2004, p. 50–51) states that logistical performance in the first Gulf War was satisfactory, citing, for example, that the first wave of 200,000 men and their equipment was displaced in a month and a half. For a point of comparison, in the Vietnam conflict the same displacement took nine months. The Gulf operation made abundant use of several current logistical concepts, such as customer service.

However, it should be noted that organic US resources were insufficient for the transport of forces in the Theater of Operations. The local infrastructure lacked resources to meet the intended logistical effort, which led to the need to mobilize new material resources and

<sup>5</sup> Encompassing Iraq, Kuwait and northern Saudi Arabia – about 1.5 million km<sup>2</sup> – an area equivalent to that of the state of Amazonas. Most of it is uninhabited desert.

<sup>6</sup> Creation of the 22nd Support Command (SUPCOM) in Dhahran (Saudi Arabia), which took place on August 10, 1990. The Command was positioned approximately 940 km from Baghdad (Iraq), and became responsible for logistical operations within the Theater of Operations. Its mission was to coordinate the arrival of major units and the logistical support provided by the Allies and by the host nation, reducing the need to relocate multiple US Army units, and establishing the logistical infrastructure needed to feed, house and supply the large number of troops arriving in Saudi Arabia.

personnel. Thus, a procurement section had to be established, responsible for the registration of suppliers and outsourcing of local service companies. Contracts were signed with local commerce companies and the Saudi Public Transport System, by means of a leasing system and by employing drivers of various nationalities to assist in the transportation of supplies and personnel within the Theater of Operations. This contract system met with several obstacles. Contractors had difficulty adapting to military standards, and there were communication problems due to the diversity of languages as well as the companies' non-compliance with the agreed upon deadlines. This caused delays in cargo delivery and hampered coordination and control, negatively affecting the logistics system (CASTRO, 2003).

According to Braz (2004, p. 57), the origins of Brazilian Army military logistics activities – especially those dedicated to supply services – date back to Imperial Brazil, with the creation of the Army's Royal Board of Armories, the Military Commissariat, and the General Headquarters. All were executive agencies charged with providing the necessary material to the Armed Forces, whether general supplies, ammunition, weapons, animals, or transport carts.

Regarding the Supply Service, Braz (2004) explains that Logistics is a key component of organizational success, directly related to cost reduction and increase in the level of service provided to customers. The author points out that, for the achievement of the objectives of the Ground Forces, a constantly improved and updated logistics doctrine has to be a priority – especially regarding the need to integrate logistical activities in order to optimize the use of available resources, reduce costs, and prioritize actions.

Thus, seeking an integrated approach to logistics, the Brazilian Army created a central body with the task of coordinating its Units' entire supply chain: the Logistics Department (D Log), responsible for the centralized coordination of most of the Force's logistical deployment functions. Moreover, the development of such a mentality, favoring the internal integration of activities, allows for the rationalization of management processes, increasing the material availability indexes of military organizations, and consequently netting an operability gain for the Brazilian Army (BRAZ, 2004).

Lopes (2009) discusses some of the impacts of the National Defense Strategy – END (*Estratégia Nacional de Defesa*) on the Brazilian Army Logistics System, arguing that, if the Institution's response to the underlying concepts of the END is to receive adequate logistical support, ground military logistics doctrine has to be updated. The author emphasizes the unfavorable conditions in the Brazilian Army – which is hampered by budgetary constraints on investment in new technologies and equipment – leading military ground doctrine (which encompasses military ground logistics doctrine) to severely lag behind.

The modernization opportunity offered by the National Defense Strategy creates the need for policies focused on the improvement of logistic structures and doctrine systems, with an aim towards the adaptation of logistic values, principles, concepts, norms, methods and logistical processes to the future reality of a modernized Brazilian Army (LOPES, 2009).

## 2.2 Logistic doctrine and the Brazilian Army's process of transformation

Currently, the Brazilian Armed Forces, in accordance with Manual MD 42 M-02 (BRASIL, 2001) – which deals with the theme of military logistics doctrine – consider the following as fundamental success factors:

- Resources should be provided in the appropriate quantity and quality, and at the appropriate time and location;
- The execution of logistical activities assumes that financial resources can be allocated as needed. If these resources are insufficient, adjustments should be introduced;
- The peculiarities of each Force do not condition the separation of Military Logistics into autonomous logistical systems; they may, however, dictate specific procedures and actions that will be reflected in the respective organizational systems without, however, conflicting with doctrinal foundations;
- Due to its outstanding and important role in solving complex problems of support to military forces, Logistics has acquired a prominent position in the operational context, and can be rightfully called one of the pillars of the art of war;
- Faced with a situation in which the resources allocated by Logistics are insufficient, Mobilization will fulfill and supplement the existing needs; hence the demand for a perfect dialogue between Logistics and Mobilization, and
- Logistical planning, regardless of level and scope, should have feasibility as its basic premise, grounding itself on the existence of immediately or eventually deployable assets, given the conditions such planning is based on.

Within the scope of the Brazilian Army and from a doctrinal standpoint, logistics are dealt with in the C 100-10 Campaign Manual (BRASIL, 2003), which aims to guide the actions of military ground logistics. The manual regards these actions as having outstanding strategic importance, and presents the following fundamental definitions:

- Military Logistics: the set of activities associated with the forecasting and provision of human and material resources as well as services necessary for the execution of Armed Forces' (AF) missions;
- Ground Military Logistics: the set of activities associated with the forecasting and provision of the necessary means for the organizational functioning and operations of the Ground Force (GF);

- Logistic function: an umbrella term designating a set of related or similar logistic activities. There are seven logistic functions: Human Resources, Health, Supply, Maintenance, Transport, Engineering, and Salvage;
- Logistic activity: a set of related logistical tasks, combined according to relationship, interdependence or similarity criteria.
- Logistic task: specific and time-limited work, which groups together interconnected steps, acts or movements according to a certain sequence and aiming to obtain a definite result.

Importantly, the ongoing process of transformation of the Army involves dimensions related to the logistical management of processes. Among the main logistical challenges that must be overcome by the Brazilian Army, we could highlight the need to supply detached platoons in distant corners of the Brazilian territory and in humanitarian missions in different regions of the world. Another noteworthy challenge lies in managing the logistics for maintaining investments in technologically complex systems and products of high strategic value, such as systems for monitoring and surveilling the Brazilian border.

According to Lopes (2009), new strategies, new technologies and new threats create needs for the modernization or transformation of the Armed Forces and their doctrine.

Referring to the launch of the National Defense Strategy, the author states (2009, p. 3, our translation) that “the initiative and participation of the National Power’s political expression in the conception of the National Defense Strategy confers this document with a broader support, beyond the military sphere.” As he notes, the document prescribes the modernization of the national defense structure by reorganizing the Armed Forces, as well as restructuring the national defense industry and the composition policy of Armed Forces personnel. This has significant repercussions on the logistics management system.

Lopes (2009) also points out that, since the end of the Cold War and the Desert Shield and Desert Storm operations, the United States Army (US) has sought to put into practice a transformation process that was initially known as Revolution in Military Affairs (RMA). The term “Transformation” was later adopted to substitute “Revolution.” The Revolution in Military Logistics (RML) is considered part of this process, aimed at integrating new concepts and technologies into the US Army.

Discussing the transformation process underway in the Brazilian Army, Maia Neto (2011) considers the demands of the “Age of Knowledge” to point out that information management has been a permanent concern for organizations, making them unceasingly look for ways to manage a huge range of information, analyzing and transforming it into knowledge and actions. Having initiated a broad process of transformation, the Brazilian

Army, he points out, has sought to adapt to this new stage, seeking to qualify its staff and rediscuss its paradigms.

Maia points to some central conditions that are starting points for this process, namely: a personnel of approximately two hundred thousand members; a large number of military organizations (about 650); a high turnover of career personnel; discipline and hierarchy as fundamental principles of organizational culture; and Brazilian society's demands for a strong performance by the Brazilian Army in several areas – especially security, infrastructure and social actions. The responsibility for finding answers to these challenges would rest squarely on the shoulders of the country's Institutions.

Fully aware of these unsettling challenges, Maia Neto analyzes (2011, p. 01, our translation):

... It is believed that Brazil's new situation as an international protagonist will be accompanied by fresh demands in various areas, from economy to defense. In this novel context, military institutions must be prepared for the challenges ahead, improving their agility and responsiveness to the needs of the population and to the global aspirations of this new Brazilian state.

The meeting of demands for the supply of a variety of inputs, therefore, should be the object of careful analysis, with a view to ensuring supply in military operations – both in peacetime and wartime – for the defense of sovereignty and the guarantee of law and order.

Regarding the National Defense Strategy – END, Lopes argues that (2009, p. 10–11, our translation):

The imperatives of flexibility and elasticity culminate in the preparation for an asymmetric war against an enemy of far superior military power, especially in the Amazon Region. Asymmetric warfare requires an effective doctrine, suited to a conjuncture of national-resistance war. In this context, the all-important mission of maintaining and building a capability for providing logistic support to the combatant forces – even under adverse and extreme conditions – rests on military ground logistics. Thus, parallel to the fact that it applies to the Brazilian Army as a whole, the END's premises of flexibility and elasticity are essential in the Amazon Region, where they offer a strong doctrinal foundation for the training currently being conducted by the Amazon Military Command (CMA) as part of the Resistance Strategy. Similarly, military ground logistics should organize itself and its action on the basis of the concepts of flexibility and elasticity ... Such characteristics will require the specific development of the military ground logistics doctrine, with the conception of tailored solutions adequate to the needs of ground troops in the varied operational environments of the national territory.

We should emphasize the importance the END places on these two aspects (flexibility and elasticity) – they must genuinely underpin the Force's logistical systems. In terms of flexibility, this assumes the adoption of modular organizations capable of providing tailor-made support

to various missions. In terms of elasticity, it points to the need for advanced mobilization tools and means of interaction with the Mobilization System, so as to increase combat and support effectiveness. There are also important aspects that are specifically linked to logistics in the Amazon Region. Currently, doctrinal studies on logistics support in the jungle operating environment are predicted to continue, taking into consideration both the conventional warfare scenario and the asymmetric resistance one.

The Brazilian Army is included in the Defense Transport System (STD). Under normal conditions, it is responsible for maintaining the Brazilian Army Transport System, a set of transportation structures and logistics organizations for providing the Army with organic support or, when thus determined, provide support to other Armed Forces, as well as governmental and non-governmental agencies and civilian agencies.

In situations of crisis or armed conflict, joint transport structures may be activated according to strategic, operational and tactical planning. The execution of joint transportation logistics activities should be coordinated by the Center for Coordination of Logistics and Mobilization (CCLM), in order to streamline actions and spare resources, particularly when involving the hiring or mobilization of civilian assets (SILVA, 2007).

### **2.3 Importance of the transport component in Army logistics**

As Bowersox *et al.* (2014, p. 200–203) observe, transportation is usually the largest logistics expense. Transportation represent more than 60% of total logistics expenses. The authors further emphasize that the cargo transportation structure consists of physical infrastructure, vehicles and carriers operating within five basic transportation modals<sup>7</sup>. In a logistics chain, functional activities are repeated several times throughout the process, causing the raw material to effectively become a final product. The goal is for it to reach the customer while providing the highest level of satisfaction (BALLOU, 2006).

Bowersox *et al.* (2014) add that the main functions of Logistics are information, transportation, storage, material handling, and packaging. Its goal is to make products and services available where they are needed, when they are needed, achieving a high standard of customer service at the lowest possible total cost.

In regards to logistical planning in its tactical dimension, the evaluation of infrastructure conditions – needed for the mobility of troops and supply systems, a necessary condition in the case of a prolonged resistance conflict – is of particular importance in the prospective assessment of armed conflict scenarios.

In this respect, strategic decisions related to transport logistics should consider this function as a

set of activities aimed at the displacement of human, material and animal resources by various means, in a timely manner and successfully reaching their intended

<sup>7</sup> A modal is a basic method or form of transport. The five basic transportation modals are rail, road, waterway, pipeline and air (BOWER-SOX *et al.*, 2014).

destinations ... Military transport must be carried out under military direction, with the purpose of meeting the needs of the Armed Forces. Depending on the route, military transport encompasses four modalities: waterway, land, air, and pipeline ... Waterway transport includes oceanic travel, short sea shipping and the use of inland waterways (LOGÍSTICA..., 2017, our translation).

The success of military operations is directly related to the effectiveness of the transports intended to support them. In this sense, lackluster transportation limits the execution of operations. Moreover, the "Ground Force will prioritize the use of its organic means of transport to meet its transportation needs." (LOGÍSTICA..., 2017, our translation). Although the Ministry of Defense has no such thing as a joint body to conduct operational-support logistics, it recommends that cooperation and mutual support between the single forces should be pursued as the primary objectives for maximizing the efficiency and effectiveness of transportation logistics. Besides, if organic resources or the support provided by other forces does not meet a force's transportation needs, these must be complemented by mobilizing or contracting civil services (LOGÍSTICA..., 2017).

The activities of the transportation logistics function are the following:

- Needs assessment – results from a detailed examination of the proposed plans and, in particular, of the proposed actions and operations. Users periodically present the planning of their needs in the upcoming period to the pertinent support bodies.
- Selection – fulfilling the necessary priorities and choosing the adequate transportation modal and means, based on the knowledge of the possible transportation means and routes.

It should be noted that transport management should pursue optimal returns from the use of the available means, minimizing transfers, employing the most flexible means of transport, and ensuring the speed, safety and flexibility of logistics operations. It should also establish measures for coordinating and controlling the movement of material or personnel, ensuring the systematic and orderly execution of traffic.

In order to meet the requirements of the Transportation Functional Group in armed conflict scenarios – which are associated with the displacement of human, material and animal resources by various means, in a timely manner, successfully reaching the intended destinations – the Brazilian Army has organic transport support structures and logistic organizations. In situations of crisis or armed conflict, joint transport structures may also be activated, according to strategic, operational and tactical plans.

Particularly when hiring or mobilizing civil assets, there must be a constant reassessment of the rationalization of logistic transport actions, logistics chain and mobilized resources. This is necessary in order to achieve the desired economy of means, considering that

transport capacity is a strong limiting component of the operating range and freedom of action of the supported forces.

It is important to remember that, in situations of armed conflict, several transport resources may be mobilized, including vehicles, personnel and physical infrastructure (highways, railways, waterways, pipelines, ports, airports, terminals and others) in the National Territory.

### 3 Socioeconomic evaluation of logistics projects

#### 3.1 Prospective assessment of the territorial approach to system investment

According to Aragão, Yamashita and Pricinote (2010), Territorial Engineering is a form of engineering whose object is the conception and implementation of Territorial Programs. On the basis of the public and private projects within a given reference area that are already being discussed by civil society, territorial engineering builds an initial programmatic outline. This is done in a cooperative manner, inclusive of public and private actors, who are the projects' protagonists. It must also consider the economic and fiscal impacts of its programs, so as to ensure that private projects are profitable and that all public projects (including projects comprised of public support for private projects) are fiscally sustainable.

It is our belief that the adoption of Territorial Programs aimed at implementing logistics-related projects could successfully gather the resources necessary to fund these projects. A logistics territorial program should contain plans and projects regarding the general configuration of the territory of interest, aiming at accessibility and mobility in that territory. It should also plan for other types of infrastructure (energy, water, sanitation, and communications, among others).

As proposed by Aragão, Yamashita and Pricinote (2010, p. 21, our translation):

This entire transformation is made possible by the scientifically based coordination of the complex of actions, which is based on the image of a logically consistent and effective artifice. This artifice concerns not only objects and actions (the subset of elements we have provisionally called a 'program'), but also the control of their effects, the process of power building and the definition of social rules (i.e., the definition of their jurisdiction); the process of coordination of work, from which the project is materialized based on organized resources (material, human, financial) and on learning itself. We call this artifice a Territorial Engineering Project. Therefore, the territory is configured partially as a network, but also as a contiguity of areas in the form of basins, especially due to concern regarding the economic, social and environmental risks of the program. The consideration of contiguity is reflected above all in the [program's] landscape project and in the [program's] systematic promotion of economic growth. Risk considerations, in turn, imply that network configurations will expand, increasingly encompassing other activities and their respective territorialities.

The premise here is that the use of models that evaluate logistical projects from a territorial perspective – notably projects for financing infrastructures and systems with high complexity and technological value (while also financing regional development) – can promote the implementation of important territorial structures and programs.

Thus, investment decisions should not be based on the gains of indirect users and beneficiaries, but rather on the investment's ability to boost economic growth in the area of influence. Tax earnings can be used to measure the effects of such an investment. This proposal is an answer to the limitations of current approaches to public and private financing. However, we should note that the object of funding cannot be limited to isolated infrastructure. It must be seen as a complex system, including infrastructure, productive projects and integrative policies.

Investments in logistics systems and transport infrastructures of interest to Brazilian Army operations can be modeled and analyzed as a set of productive actions carried out by a dispersed number of actors. In this sense, the economic results, wealth generation and social benefits of programs and projects cannot be attributed directly and exclusively to infrastructure. Therefore, what we have here is an innovative proposition for the analysis of infrastructure and logistics investments, which enables a complex treatment of the problem of financing – regarding it as a “territorial program” and resorting to the Territorial Engineering method. The Territorial Engineering project, derived from this territorial program, is a set of infrastructure projects, production plants, integrative policies, and project management actions (technical project management, financial management, political management, legal management, and cognitive management). The program's goal is to produce the controlled result of a regional economic growth significant enough to offset the tax authorities' contribution by providing a positive cash flow comprised of tax revenues, which arise from growth directly attributed to the territorial program itself.

According to this territorial approach, projects should be chosen according to their integrative potential to cause significant technological impacts. These impacts should spill over to other sectors. The aeronautics industry exemplifies this spillover effect: technologies and skills developed in this sector can be used in the development of a new family of next-generation commercial jets, for instance.

According to Aragão, Yamashita and Pricinote (2010, p. 26, our translation), a project's integrative potential is not only dependent on the availability of financial, human, material and technological resources, but also on political initiative, since “territorialization does not follow instrumental logic alone, but also cultural logic, especially that of local reaction to supralocal initiatives.” Furthermore:

The state will never be absent in territorialization processes ... it may lose the monopoly of power, but will remain an essential force – an orchestrator, global agent and risk manager. Its action ensures the necessary combination of competition and cooperation.

For Brazil in particular, recent government documents<sup>8</sup> call for the return and strengthening of integrative planning as a tool to reduce regional disparities, focusing on regionalization, economic consolidation and creation of growth poles, rationalizing the infrastructure network.

It is important to consider the socioeconomic feasibility of logistics projects by applying integrated territorial-action models. These should be designed and evaluated according to their ability to meet the project's needs. The construction and, above all, the management of such a project leads to important technical and political challenges, from the conception and implementation to the operation and evaluation, in a given territory, of overarching initiatives consisting of feasible public and private subprojects. These should aim to produce a satisfactory economic growth, which shall be used for funding and remuneration. Thus, public contributions should mostly be funded by the increase of fiscal resources collected from the achieved economic growth (ARAGÃO; YAMASHITA; PRICINOTE, 2010).

### **3.2 Socioeconomic evaluation of projects and the “Army Aviation” program**

In the manual “Programa Avaliação Socioeconômica de Projetos: Oficina Socioeconômica de Projetos de Defesa” (RAMALHO *et al.*, 2010), a case study involving the KC-390 aircraft proposes the following criteria for evaluating alternatives in the acquisition of such aircraft:

- a. technical, economic and financial aspects and deadlines, with their various associated risks;
- b. technological and industrial capacity of the domestic industry, and particularly Embraer's, to develop a military transport aircraft;
- c. political and social aspects of the program (desired degree of independence in regards to aircraft operation and maintenance, technological development, preservation of work hours in the national industry, among others);
- d. the country's desire to retain intellectual property derived from the program's execution, so that the aircraft can be updated, operated and maintained autonomously throughout its operating life;

<sup>8</sup> Documents from the Ministry of Planning, Budget and Management (2008) entitled “Estudo da Dimensão Territorial do Planejamento. Volume 2: Visão Estratégica Nacional,” “Estudo da Dimensão Territorial do Planejamento. Volume 3: Regiões de Referência,” and “Estudo da Dimensão Territorial do Planejamento. Volume 4: Estudos Prospectivos. Escolhas Estratégicas,” as well as the document “Subsídios para a definição da Política Nacional de Ordenação do Território – PNOT. Versão preliminar.” The latter is a study with the participation of the Inter-American Institute for Cooperation on Agriculture, the Brazilian Association of Technological Research Institutions, the Ministry of Planning, Budget and Management, and the Ministry of National Integration, Universidade de Brasília (2006).

- e. the guidelines established in the National Defense Strategy, which ensure that purchase decisions are made according to the primacy of commitment to the development of national technological capabilities in defense products, and of the socioeconomic benefits brought to Brazil.

In order to meet the needs of the Brazilian Army, as well as that of civilian humanitarian aid, the Army Staff presented the Army Aviation Program (EXÉRCITO, 2017)<sup>9</sup>, a part of its Strategic Portfolio. It includes tests and studies to support the Force's acquisition of 16 transport and 12 attack aircraft.

The Brazilian Army's evaluation of attack and transport aircraft included the following transport aircraft models: Leonardo AW139M and Leonardo AW149 (Italy), Bell UH-1Y "Venon" – US Marines (USA) and Leonardo AW101 Merlin (England). The evaluated attack aircraft were the following: Leonardo T-129 "Mangusta Modernizado" (Italy); Leonardo A-129D "Mangusta" (Italy); Rostvertol MI-28NE (Russia); Bell AH-1 "Viper" US Marines (USA). Troop-transport and multi-purpose helicopters have a top speed of 300 km/h, with a range of up to 1000 km, while combat helicopters have a range of up to 800 km, operating at top speeds between 300 and 365 km/h.

In addition to its weapons systems modernization project and flight simulator project, the Army Aviation Program includes the projects known as "Maintenance of Operative Capacity of Transport Aircraft,"<sup>10</sup> "Expansion of Logistic Transport Capacity,"<sup>11</sup> and "Obtaining Attack Capacity."<sup>12</sup> The attack aircraft will also enable electronic warfare, intelligence, armed reconnaissance, surveillance and target acquisition missions. The Project provides for the acquisition of 12 (twelve) aircraft, fully equipped with weapon systems (machine guns, cannons, rockets and missiles) and optronics (color camera, night vision and infrared), simulators, crew training and maintenance.

The process of modernization and fitting of aircraft within the scope of the Army Aviation Program should consider as operational requirements the aircraft's availability and operating cost, with emphasis on aspects related to the integrative capacity of investments that have a strong technological base. This is certainly the case for the installation of bases geared towards airborne logistical support, which have several effects on the economy, creating value in the form of patent-market value and in the form of new products and projects, generated by the obtained knowledge.

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<sup>9</sup> Available at: <https://bit.ly/2Y4kzNI>. (Primary source: Brazilian Army Communication Advisory. Access on: Mar. 20, 2018)

<sup>10</sup> To provide the Army with new medium-sized aircraft to replace the current transport aircraft that are in the obsolescence phase. Provides for the acquisition of 16 (sixteen) aircraft.

<sup>11</sup> To acquire fixed-wing aircraft will enable the Ground Force to fulfill its Immediate Strategic Response (although in a limited way), Command and Control (command liaison) and Logistics Support missions, particularly at the border strip, supporting the Special Border Platoons.

<sup>12</sup> To enable the Ground Force to develop its combat capabilities, support the Ground Forces (Surface Action and Maneuver operative capabilities) and act upon compensating targets with precision, lethality, depth and appropriate effects (Fire Support operative capability).

### 3.3 Transport logistics projects and the Defense Industrial Base

The positive effects of investments in Defense Industrial Base (DIB) defense projects are referred to in the literature as “spillover” or “spin off” effects. These terms are related to the civil-environment benefits of an ongoing technological development, even if this development was originally intended to meet strictly military demands:

The notion of economic spillover or spin-off effects is based on the assumption that the resources employed for the development of defense systems, as well as the resulting new technologies, may have applications in civilian environments. This assumption peaked during World War II, when the enormous war effort boosted research and development aimed at finding new ways to surprise the enemy. This spawned a large number of weapon-system technologies that were later directly or indirectly applied in the civil environment. Examples are the radar, sonar and synthetic rubber (FIELD, 2008; *apud* ALCOFORADO *et al.*, 2016, p. 105).

As for the potential to leverage the country’s development, the better-structured among defense projects stand out. According to Alcoforado, Braga and Vilela e Silva (2016), they have significant impacts on the high-tech field, creating skilled jobs in one of the most growth-shy sectors of the Brazilian economy. The authors also point out that, as the production chain as a whole develops, the Brazilian aerospace sector will be able to increasingly absorb investments in the aerospace defense industry. However, to make companies globally competitive, socioeconomically viable projects are necessary, including a regular cadence of orders and research investments.

In the case study “Desenvolvimento da aeronave KC-390 da Embraer,” Alcoforado, Braga and Vilela e Silva (2016) studied the socioeconomic impacts of the 2009 Brazilian government’s procurement of Embraer for developing and producing two prototypes of a 20-tonne-class, multi-mission military transport aircraft (the KC-390)<sup>13</sup>. The authors evaluated the aircraft’s socioeconomic impacts, technological spillover effects and broader socioeconomic benefits according to the methodology proposed by Hartley (2013, *apud* ALCOFORADO; BRAGA; VILELA E SILVA, 2016).

According to them, the benefits brought by the development of defense programs should, whenever possible, be evaluated against possible existing alternatives, including market-ready products and joint development with other countries. Moreover, such analyses should go beyond development/acquisition, considering the project’s life cycle in its entirety.

<sup>13</sup> Aims to replace the KC/C-130 Hercules Aircraft unities currently in operation, all over 30 years old. It was the first FAB project to be evaluated and approved in its technical and socio-economic feasibility by the Technical Chamber for the Evaluation of Major Projects of the Ministry of Planning, Budget and Administration. The approval was published in DOU Section 1, Issue No. 188, of 10/01/2009, p. 72.

Thus, the authors list several benefits of the project, such as job creation during its development, production and support; technological advantages; contribution to a positive trade balance; compliance with pre-established requirements such as interoperability across different Armed Forces, independence in the management of the aircraft's life cycle, etc.

The correct identification of the benefits and costs of a project stems from comparing the no-project-needed scenario to the project-development scenario. Both scenarios can have positive or negative consequences.

In the preliminary analysis on the feasibility of a project for the implementation of aerial logistic-support bases using helicopters, a comparative assessment including the alternatives of other forms of air transport or of multimodal transport would be performed. This assessment would consider the user's needs and performance expectations for the system, and each alternative's respective operation costs.

Discussing the current Defense Industrial Base scenario in Brazil, Alcoforado, Braga and Vilela e Silva state the following (2016, p. 47, our translation):

In any case, reversing the current situation is not an easy task, as the defense industry, due to its peculiar characteristics, is subject to low government demand, high project-maturity time and strong international competitiveness. To counteract this reality, the DIB needs adequate public policies and incentives able to remedy this market's shortcomings, ensuring that Brazil can produce its own defense material, within a scope plausible for obtaining the political-strategic stature society desires the country to have. Project KC-390, due to its peculiarities and expectations of promising results, could serve as a model to improve studies on the economic impacts and societal gains of major defense projects.

#### 4 Final Considerations

Infrastructure determines various human activities in a decisive way. The planning of the Brazilian Army's personnel mobilization activities, specifically in the Border Area (BRASIL, 2009), is an activity of remarkable strategic value.

The ongoing process of Army transformation involves dimensions related to the logistical management of processes. As we pointed out, among the main logistical challenge that must be adequately faced by the Brazilian Army is the need to supply detached platoons in distant corners of the Brazilian territory, as well as humanitarian missions in different regions of the world. Another challenge is to manage the logistics necessary to maintain investments in technologically complex systems and products of high strategic value, such as monitoring and surveillance systems to be used in the Brazilian border.

As indicated by Lopes (2009), new strategies, new technologies and new threats create needs for the modernization or transformation of the Armed Forces. This process was leveraged

by the launch of the National Defense Strategy, an important component of the National Defense Policy. It is noteworthy that the document's scope goes beyond the military sphere.

Lopes (2009) also notes that the document prescribes the modernization of the national defense structure, by reorganizing the Armed Forces and restructuring the national defense industry as well as the Armed Forces' composition policy. This has significant consequences for the logistic management system, since, for some time now, new technologies have been creating pressure in favor of the modernization of the Brazilian Armed Forces and its logistic doctrine. This article presented doctrinal and conceptual aspects of transport logistics applied to the military, pointing to the logistics behind support for the US offensive in the Gulf War as a paradigmatic situation. However, we should point out that are significant doctrinal differences between the US Ground Forces and the Brazilian Ground Forces. Lopes (2009) notes the differences in the economic potential of the two countries, which are reflect of their respective conceptions for the employment of the Military Expression of National Power. The US is characterized by the projection of power wherever its interests are threatened, in contrast to the provisions of the Brazilian Federal Constitution, which establishes that the Armed Forces' goal is the defense of the country.

In the Gulf War, the actions to ensure the concentration of military assets were planned and executed well in advance, and only after they were concluded did the offensive phase begin. This was the mission of the 22nd SUPCOM<sup>14</sup>, which implemented a large overseas logistics structure in an inhospitable TO<sup>15</sup> and with scarce resources, considering the humongous demands of a full Allied deployment. In the case of the Brazilian Army and according to its conception of deployment, a preexisting military structure should be present even during peacetime. This structure would be capable of evolving to CLTOT, an equivalent to the 22nd SUPCOM (CASTRO, 2003).

It should also be noted that the organizational structure deployed in the Arab territory was assembled from other command units located both in the US and outside its territory, in addition to having the strong support of Saudi Arabia (host country) and various other nations, in the form of a coalition. Brazil does not have to depend on such external displacements or on the use of foreign labor, whether military or civilian. The US logistical bases were established to pre-position supplies in support of strategic vectors, proving fundamental in the 22nd SUPCOM logistics system. In Iraqi territory, some of the planned logistics bases were not installed due to the operations' short time span. However, in others, complementary and small-scale health and maintenance logistic activities were carried out.

Benvenutti Castro (2003) argues that:

The Brazilian Doctrine does not provide for the establishment of logistical bases in anticipation of the Army's campaigning effort. However, the unfolding of Advanced Supply Stations from the most important classes to the ongoing operations is a possibility.

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<sup>14</sup> *Supply Command* [Comando Logístico – Suprimento].

<sup>15</sup> Theater of Operations.

The Brazilian Army logistical base is a large Logistic Command for holding Military Logistics Organizations created during peacetime. They may be complemented by the mobilization of civilian resources. ... The US logistical bases were predominantly areas for resource pre-positioning, which was coordinated by a Logistics Command. Thus, it would be more appropriate to compare them with a large logistical support area.

In the Brazilian Army, Logistics remains relegated to a secondary plan, in spite of the intensification of its study in schools and the creation of the COLOG, fathered by the new Army Basic Organization (*Organização Básica do Exército – OBE*) ... Integrating logistics with the planning and execution of maneuvers at the various levels of command, starting from peacetime, equates to having learned the lessons of military history that have been made increasingly relevant by the Gulf War.

Regarding the logistic and transport factors related to the Case Study under discussion, we emphasize the importance of expanding the state's presence in remote regions by means of airborne support with helicopter vehicles, aiming to take full advantage of the benefits inherent to the flexibility in this mode of transportation. Public policies and governmental actions with a territorial basis are also fundamental for the promotion of regional development in the Amazon.

It is also noteworthy that the presence of the Brazilian Army in the region is fundamental for the execution of state actions and Public Policies. The implementation of bases for helicopter support has to be improved at a managerial level, especially in the Amazon area, with emphasis on the dimensions related to logistics and transportation systems. These are necessary measures to favor the flexibility of military operations therein.

## References

ALCOFORADO, D. A.; BRAGA, F. C. C. S.; VILELA E SILVA, M. U. Efeitos de transbordamento para a economia, decorrentes do desenvolvimento de grandes projetos de defesa: um estudo de caso do projeto KC-390. **Revista da UNIFA**, Rio de Janeiro, v. 29, n. 1, p. 37-48, jan./jun. 2016.

ARAGÃO, J. J. G.; YAMASHITA, Y.; PRICINOTE, M. A. **Engenharia territorial: problemas e territórios programáticos**. Brasília, DF: CEFTRU/UnB, 2010. (Texto para Discussão, 8).

BALLOU, R. **Gerenciamento da cadeia de suprimentos**. Porto Alegre: Bookman, 2010.

BOWERSOX, D. J.; CLOSS, D. J.; COOPER, M. B.; BOWERSOX, J. C. **Gestão logística da cadeia de suprimentos**. Porto Alegre: McGraw Hill, 2014.

BRASIL. Exército. **Manual MD42-M-02**: doutrina de logística militar. Brasília, DF: EMCFA, 2001.

BRASIL. Ministério da Defesa. **Manual de campanha**: logística militar terrestre. 2. ed. Brasília, DF: Comando de Operações Terrestres, 2003. C 100-10.

BRASIL. Ministério da Integração Nacional. **Faixa de Fronteira**: Programa de Promoção do Desenvolvimento da Faixa de Fronteira (PDFF). Brasília, DF: Secretaria de Programas Regionais, 2009.

BRAZ, M. A. L. **A logística militar e o serviço de intendência**: uma análise do programa excelência gerencial do Exército Brasileiro. 2004. Dissertação (Mestrado em Administração Pública) – Fundação Getúlio Vargas, Rio de Janeiro, 2004.

CASTRO, F. B. A logística na guerra do Golfo. **Segurança e Defesa**, Rio de Janeiro, 4 abr. 2003. Disponível en: <https://bit.ly/30HZlqM>. Accedido en: 30 dez. 2017.

CHRISTOPHER, M. **Logística e gerenciamento da cadeia de suprimentos**. São Paulo: Pioneira, 2001.

CUNHA, E. **Canudos**: diário de uma expedição. O Estado de S. Paulo, São Paulo, 09 set. 1897. Disponível en: <https://acervo.estadao.com.br/noticias/acervo,canudos-diario-de-uma-expedicao-euclides-da-cunha-891897,11964,0.htm>. Accedido en: 08 set. 2019.

EXÉRCITO avalia modelos de aeronaves de ataque e de manobra. **Abimde**, São Paulo, 28 mar. 2017. Disponível en: <https://bit.ly/2Y4kzNI>. Accedido en: 20 mar. 2018.

HARTLEY, K. **The economics of defence policy**: a new perspective. London: Routledge, 2013.

LOGÍSTICA transporte. **Logística Militar**, [S. l.], 23 maio 2016. Disponível en: <https://bit.ly/2GjWlt1>. Accedido en: 20 jul. 2017.

LOPES, A. M. **A doutrina logística militar terrestre e a estratégia nacional de defesa**. 2009. Artigo científico (Especialização em Política, Estratégia e Alta Administração Militar) – Escola de Comando e Estado-Maior do Exército, Rio de Janeiro, 2009.

MAIA NETO, J. O processo de transformação do Exército Brasileiro: um estudo sobre os reflexos da era do conhecimento. **Coleção Meira Mattos: Revista das Ciências Militares**, Rio de Janeiro, n. 24, dez. 2011. Disponível en: <https://bit.ly/2Y0Z0xF>. Accedido en: 29 nov. 2017.

PAGONIS, W. G.; KRAUSE, M. D. A logística na guerra do Golfo. **Military Review**, Fort Leavenworth, v. 72, n. 4, p. 2-12, 1992.

RAMALHO, A. J; LOPES, A. A.; SILVEIRA, H. G.; ZAVARONI, A.; LIMA NETO, D.; FILGUEIRAS, E. Q. Programa Avaliação Socioeconômica de Projetos: oficina de Avaliação Socioeconômica de Projetos de Defesa. *In: SILVA NETO, L. (coord.). Catálogo de cursos ENAP*: 2012. Brasília, DF: Enap, 2010.

SILVA, J. J. G. Logística e mobilização nacional na Amazônia Ocidental: reflexo para os pelotões especiais de fronteiras. **Cadernos de Estudos Estratégicos de Logística e Mobilização Nacionais**, Rio de Janeiro, v. 1, n. 1., p. 51-75, 2007.

TZU, S. **A arte da guerra**. São Paulo: Novo Século, 2014.



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